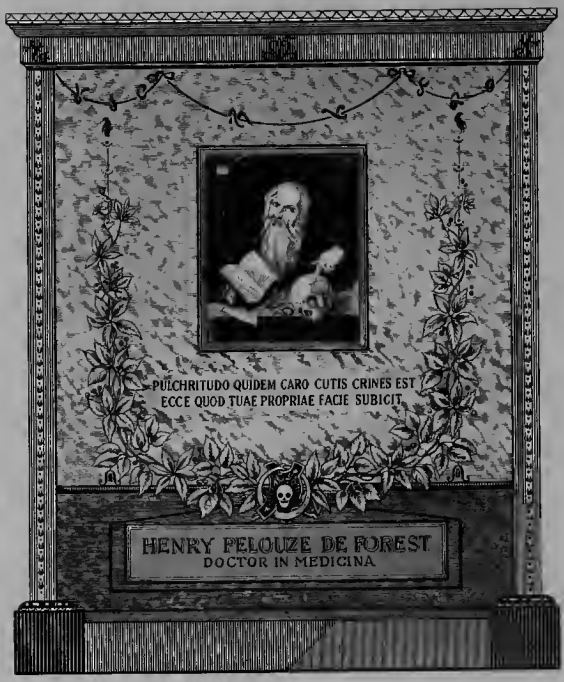
CARVER'S CHIROPRACTIC ANALYSIS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HENRY PELOUZE DE FOREST
CLASS OF 1884

BRENTON R. GRANT
128 WEST SEVENTY-FIFTH ST.
NEW YORK CITY

Dr. Henry P. de Forest,
71 Central Park West
New York Cy.

Sir.

Allow me to add my congratulations to
thousands you and Dr. B Baldwin must hav
ived in recognition of your marvelous discov

Such devotion to research is most commen
and I hasten to offer my most humble assist
and I firmly believe, that of my colleagues, w
have practiced the form of manipulation yo
discovered for thirty years.

Sincerely,
Brenton R. Grant
Chiropractor

Henry Pelouze de Forest
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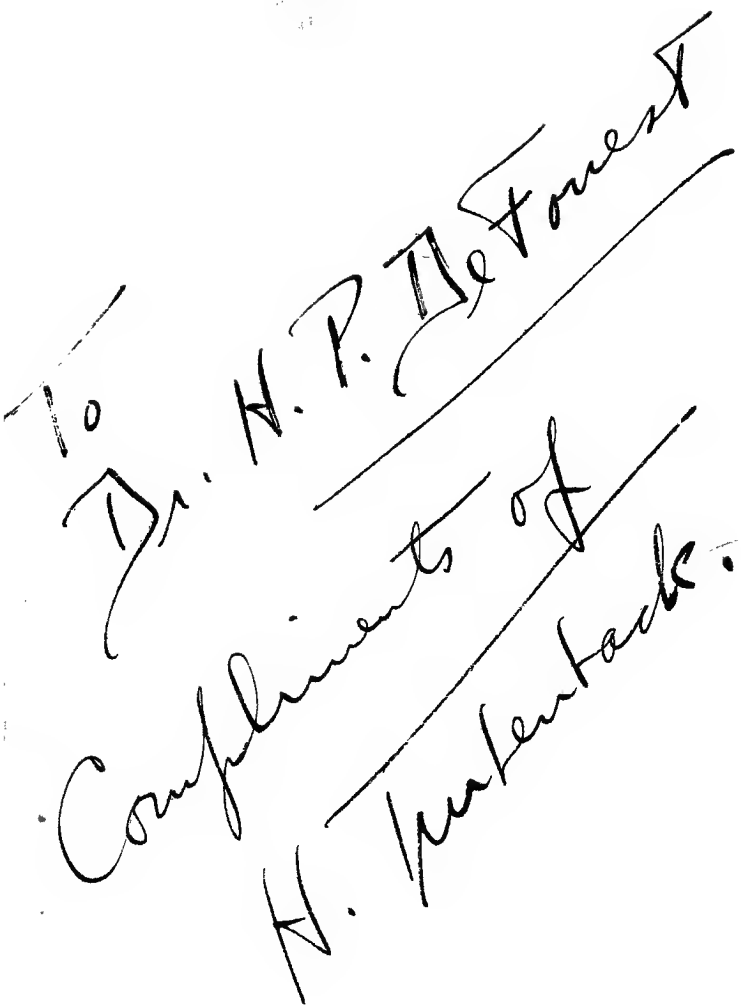

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Carver's Chiropractic Analysis

OF

Chiropractic Principles

AS APPLIED TO

PATHOLOGY, RELATOLOGY, SYMPTOMOLOGY AND DIAGNOSIS

IN TWO VOLUMES
OF WHICH THIS IS VOLUME
TWO

BY

WILLARD CARVER, LL. B., D. C.

DEAN OF THE FACULTY AND GENERAL LECTURER ON ALL SUBJECTS OF CURRICULA OF CARVER CHIROPRACTIC INSTITUTIONS, MEMBER OF IOWA BAR SINCE 1891. AUTHOR OF APPLIED PSYCHOLOGY, STUDIES PREPARATORY TO THAT OF CHIROPRACTIC, ROUGH NUGGETS, PSYCHO-BIO-PHYSIOLOGY, ETC.

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OKLAHOMA CITY, OKLAHOMA

CARVER CHIROPRACTIC INSTITUTE
NEW YORK CITY

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PREFACE

(To Second Edition)

In this book I have tried to place before the profession, students and society in general, Chiropractic Symptomology in its comprehensiveness.

In this attempt I have had nothing to guide me, except the limited treatise on symptomology as I wrote it for the first edition, which was enlarged considerably in the second edition of The Analysis.

In producing this book, I have tried to keep away from the therapeutic lines and methods of discussion as much as possible, and it was for that reason I used the word Symptomology, instead of that cumbersome and, to me, meaningless one, Symptomatology, almost exclusively used by therapeutists.

I start with the fact, that the symptoms of relation are the expressions of health, and that the symptoms of disrelation are the expressions of disease, and carry this fundamental to its deductive details.

It has been necessary to introduce some very unusual propositions into this work, but it must be remembered that the science of Chiropractic is new, cardinal and very unusual.

If disrelation of the parts of an organism is not disease, then this book is all wrong. However, I am

willing to stand or fall on that proposition, for, if that proposition is not a fact, then what has been called the science of Chiropractic is wrong and can never be a science.

Much of this book is original dictation, instead of revision, and was given in the emergencies and exigencies of a very busy time, under great stress and weariness, therefore, if the language does not have the rhythmic flow which might be desired, I did the best I could under the circumstances.

I am sure there is much more to be added to the subject of Chiropractic Symptomology, and that many details and illustrations are yet needed, but I feel that this work will act as a guide for future writers, who are more adept than

Your sincere

WILLARD CARVER.

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Part Four

SYMPTOMOLOGY WITH ANALYSIS OF PHASES OF DISEASE DEDUCED FROM CHIROPRACTIC PATHOLOGY WITH THE DETAILS OF ADVERSE PROCESS

CHIROPRACTIC ANALYSIS

CHAPTER I

REMARKS ON SYMPTOMOLOGY

Symptomology is a discussion of the symptoms of disease. Indeed, is more than a discussion—it is a systematization and classification of the symptoms of disease.

The therapeutic conception is that symptomology is a discussion of the symptoms of functional disease, for they do not conceive that there could be symptoms of anything other than functional disease.

Based upon this erroneous conception they have propounded the proposition that there are two kinds of disease—organic and functional. And the entire discussion has been directed to the symptoms of functional disease, which they call " symptomatology."

The erroneousness of the conclusion stated becomes fully manifest when it is recalled that there is only organic disease; or, to put the matter in more simple and practical language, there is only tissue disease. From this standpoint, then, it is impossible to discuss the symptoms of disease, except to discuss the evidences of tissue disease, or, to completely include the therapeutic idea, organic disease.

Symptomology, as we desire to present it here, is a systematization, classification, and complete discussion

of all of the evidences tending to prove tissue abnormality which we have generally designated under the term, anatomic disrelation.

Incident to the discussion of the symptoms of disease, it would seem almost necessary that first and paramount attention should be given to the subject of functional abnormality, but when it is remembered that each phase of function has its incipient and corresponding anatomic disrelation, it will be understood that the whole subject reverts to a discussion of the symptoms which prove that anatomic disrelation.

The author expects that this statement and attitude will be somewhat difficult to comprehend by those fully immersed in the thoughts of therapy, and constantly in the habit of thinking in the circular treadmill of therapeutic theories. However, it is certain that a little patient and specific investigation on the part of the student will completely reconcile him to the facts as stated.

Just at first it would seem that the symptoms of tissue abnormality would be few and quite easily stated. This semblance comes from memory and conceptions of so-called therapeutic physical diagnosis. We all recall the physician coming to our bedside, when we were children, feeling our pulse, looking at the tongue, examining the eyes, and perhaps placing the hand upon the abdomen, and then going off into a long series of questions, directed to those who had us in charge, as to conduct, sensation, and so forth, for a considerable time back. These constitute the sum total of our memory of physical examination.

In the light of our latest developments along the lines

of physical diagnosis from the therapeutic standpoint, the good old method of feeling the pulse, looking at the tongue, listening to the heart, taking the respiration, and percussing the cavities, has only been added to by the attempt to analyze colloids and excretions taken from the body, which has not had the effect of leading us any further in the right direction, or giving us any more definite knowledge of the actual anatomic situation.

The therapeutic profession prides itself much upon physical diagnosis, but all of its investigations have been investigations of functions, instead of investigations of tissue conditions, save and except, the examination of the eye, the tongue, and percussing the cavities. These were really means of ascertaining tissue conditions, but the difficulty about it is, therapeutists do not know that fact to this day.

The medical doctor examines the eye solely for the purpose of noting its brilliancy or dullness. In other words, its appearance, and with no thought that the eyes actually reveal tissue conditions.

The physician percussed the cavities of the body not for the purpose of determining anatomic disrelationship, but for the purpose of ascertaining certain functional situations, and never undertook to go behind the functional situation to the anatomic situation producing the functional expression. It never occurred to him that the anatomic situation was just as abnormal as was the functional expression arising from it.

It is true the physician looked at the tongue to see whether it was coated, and the character of coating, but this was not for the purpose of ascertaining the abnormality of the tissues of the tongue, nor yet of deducing

other anatomic disrelations, perhaps of the stomach or otherwise, but was to determine certain adverse functional conditions, and again it never occurred to him that the adverse, functional condition he was looking for was always produced by anatomic disrelation exactly equal thereto.

The remarkable situation which the basic principle of Chiropractic disclosed relative to the matter of symptomology is the high mark it reached relative to physical diagnosis. The Chiropractor's diagnosis in the very first instance, and indeed in its entirety, is an investigation and comparison of anatomic relationship and anatomic disrelationship.

The Chiropractor in examining a case gives his entire attention to the one thought of ascertaining all of the phases of anatomic disrelationship. His search, then, is to isolate the symptoms which establish anatomic disrelationship, and its degree or gravity. This is accomplished by a very careful comparison of the situations found with the approximation of normal anatomic relation in the individual under examination.

In the light of the last statement it will be clearly seen that each phase of anatomic disrelationship is a symptom tending to establish the general distortion that then exists in the organism of the one being examined.

In examining an individual to determine the amount and character of his anatomic disrelation, the Chiropractor does not by any means neglect physical conduct, for he well knows that physical conduct is a true expression of anatomic relation, and he knows that a careful examination and investigation of conduct will

aid him in deducing the character and amount of anatomic distortion.

Chiropractic symptomology, therefore, is a complete investigation primarily of the entire anatomic structure of the individual under investigation, and in the second place of the entire conduct of each anatomic part of that person. The last, not with the intention of ascertaining what disease exists, but for the purpose of aiding in the deduction as to the amount and character of anatomic distortion, ordinarily called disease, that exists.

In pursuing the work as outlined in this chapter, the student must expect to meet with many confusing and difficult propositions, and he must note that his only means of arriving at a clear and definite understanding of the whole matter rests, first, in his ability to form a very accurate approximation of the anatomic situation that should maintain in a given organism; second, in his ability to observe all of the anatomic digressions from that situation and to give to each phase just appraisement, and third and finally, his ability to divest himself of all influences remaining in his memory derived from therapy and from all therapeutic conceptions of disease.

If the student will start out in the study of symptomology with a mind singled to the one fact, that all disease consists in anatomic disrelation, and will fully follow that thought out definitely and deductively, not straining to arrive at any conclusion but only to arrive at convictions that are forced upon him by the actual situations found, he will not meet with any insurmountable difficulties, but he will find himself with a clear vision and understanding of the actual situation with which he is confronted in the given case.

CHAPTER II

DISRELATIONSHIP

Because of the inability of language to fully express our meaning, disrelation has generally been conceived and expressed by the word "displacement." This has given room for a certain amount of error.

Displacement in its basic conception leads the mind to fix upon a place from which something has been forcibly ejected, and in a certain abstract sense this is not wholly true of disrelationship.

At first thought the student may not see much difference between the terms place and relation. However, there is a considerable difference, and it is a difference bearing an important relation to the themes about to be presented.

A thing may be responding to the impulsion of force, and be in motion, and still in such conduct be responding to the law of its being or existence, and therefore, be occupying, in the highest and best sense of the word, its relation to all other things.

A thing, however, that is in motion, and occupying relation as incident to that motion can scarcely be conceived to be occupying a place disassociated from the idea of relationship.

A structure may be responding to the impulsion of force, but not be performing conduct in harmony with the law of its being, and therefore be out of relationship with parts with which it should be related, which

situation has too frequently been called, " being out of place," or " displaced."

The first error, then, in the use of the word " displacement " comes from the fact that place applied to a moving structure is hardly a correct term, but a moving structure occupies relationship, and in that sense place, and therefore, when it is out of relationship it should be said to be disrelated instead of displaced.

In order to fully grasp the thought of relationship, as contra-distinguished from that of place, it must be remembered that force has definite modes of action, and that what we are prone to call "forces" are only the modes or phases of action of force.

For illustration: attraction of gravitation has a universal mode of operation which we conceive to be the same under all circumstances. Magnetism is another phase of force. Cohesion and adhesion are still others, all of which are but phases of universal force.

It must be understood that behind each of these illustrations of a phase of force there is a law universal in its application, and that these named illustrations, and many others presented in the subject of physics are but partial expressions of universal force, which in its ultimate comprehension means universal harmony.

The meager demonstrations of universal force which we are able to observe many times appear to be in opposition with other phases of force, yet it is easy to see that if our understanding was sufficiently comprehensive, we would know that what we call "forces" are but the multifold expressions of one great force, and that the operation results in universal movement, frequently called vibration, of each particle of the universe and

yet gives to each particle of the universe place in the sense of relationship.

In this phase of the thought the subject of place assumes a position of profound comprehension, and this is especially true when the subject is turned to the human organism, for there we see that the particles composing the organism have no place from the standpoint of location, because they are constantly in motion, and frequently in a state of locomotion, and that they only have place in the sense of relationship to other particles composing the organism, and this relationship is maintained regardless of the fact that all parts are continually in motion.

A single phase of force, then, from the standpoint here explained and expressed, acting in an undisturbed manner upon matter, causes all of the particles of that matter to respond to that force. All of the particles that are of the same kind are caused to respond in the same way, and the particles that are of different chemical composition are caused to respond, but in different ways, according to the law of their construction. The result, while it may seem to be inharmonious, is not so.

The difficulty the student meets with, in a contemplation of the subject now being presented, is that no single phase of force can be demonstrated by itself, for the reason that it is a part of universal force, and therefore, there always are other so-called forces, or phases of force, that must be taken into consideration and accounted for in any demonstration.

In an attempt to consider the operation of that phase of force which has been called gravity, or the attraction of gravitation, the phases of force incident to cohesion,

adhesion, ponderability, convergence, divergence, and others must be kept in mind, and given due consideration in arriving at any conclusion therefrom.

In an attempt to consider the action of that phase of force, which we have called the force of life, in its action upon matter, the operation must always be considered, keeping in mind all other phases of force that at the same time apply to the matter under consideration.

In this connection it must be understood that the force of life in its conduct of constructing and maintaining an animate organism must act in apparent harmony with, and in apparent opposition to the phases of force that in no sense enter into the production of animation.

A few illustrations of these propositions may help a little at this point, and will, therefore, be given.

In the department called assimilation the force of adhesion must be overcome in the lymph of the intermolecular spaces; the influence of gravity must be overcome; the force of tonicity must be overcome, and against these phases of force molecular or atomic impact under the impulsion of the force of life must be accomplished, bringing the particles within the scope of the law of cohesion.

In other words, it must be understood that in order that the force of life may produce animate structures, it must at least produce apparent displacement or disrelation in order that it may produce the relationship of cohesion, which alone furnishes the basis for and possibility of animation.

If the student has carefully followed the subject thus

far, he is prepared for the statement that no molecule, cell, segment, or organ of the body has place *per se*, but that the place to which we refer in the terminology of Chiropractic is that of the relation which each atom, molecule, cell, segment or organ sustains to others.

We deduce the fact that those atoms, molecules, cells, segments, or organs are in relation so long as they are responding to the unobstructed or undisturbed force of life, and that when they are not so responding, those failing to so respond, are in disrelationship—are out of place—displaced.

It would seem that these statements and deductions are so clear that no further illustration of them is necessary. Yet, for fear that the student may not grasp the exact thought, a few applications of the laws just stated to the human body are here definitely made.

A vertebra has no place *per se* any more than a cell in the biceps has. The vertebra only has place in contemplation of its relationship to its fellows and relative tissues, if it occupies its exact relationship to all such structures, that is to say, cartilages, ligaments, arteries, veins, lymph vessels, lymph glands, etc., we say it is in place. We realize that we only mean that it is in relationship.

It follows that the relationship of a vertebra can only be determined by a comprehensive view of the entire organism, for it must be seen that in the normal the human organism would be a harmonious whole, each part expressing a harmonious relationship to all other parts, and therefore, each part of the organism exercising a certain influence upon each other part, and this is

true notwithstanding the fact that we have not yet developed the perfect human body.

" Displacement of a vertebra," then, as it is frequently spoken of in Chiropractic terminology, does not mean the removal of the vertebra from a certain place, but it means the change of relationship of the vertebra to its relative structures. These may be cartilages, ligaments, muscles, arteries, veins, or any other structure including all structures of the given area. But if anything has occurred to produce displacement of an infinitesimal part, that amounts to disrelationship of the same proportional gravity.

In the sense of the subject now under discussion it will be seen that the disrelationship of a vertebra is not a trifling matter of local consideration, but presents for consideration a local disrelationship and a disrelating influence that acts upon and produces adverse results of the distortion type in the whole organism.

In the same sense just discussed a viscus has no place *per se*, but occupies a definite relationship to other parts or organs, and the displacement of a viscus presents a problem of disrelation and disrelating influence that must in each case be analyzed to its ultimate in all parts of the organism, for it must be known that such disrelationship will affect all parts of the organism.

" Displacement " so-called in a joint of the appendal portions of the body presents precisely the same nice question of disrelationship and disrelating influence throughout the whole body, and the effects of such disrelationship must be followed, and appraised in all parts of the organism.

Disrelation of a tendon, muscle, ligament, cartilage,

artery, vein, or any other structure presents the same nice problem, and the same disrelating influence throughout relative and remote structures, and must be followed in all of its details in order that the effects may be well understood.

Having placed before the student in as concise a manner as possible the facts of disrelationship, we must proceed in the next chapter to discuss certain phases of symptoms that arise from disrelationship.

CHAPTER III

ORIFICIAL ABNORMALITY

It goes without saying that orificial abnormality can not be discussed without a prefatory, or introductory statement, and it must be sufficiently comprehensive to render the whole subject clear to the student.

ANATOMIC SITUATION

There is a belief on the part of the therapeutic doctors that what they call the "cerebro-spinal nervous system" exists as separate and distinct from what they call the "sympathetic nervous system."

They designate the cerebro-spinal system as the "father of the house," having control of what they call the outside, or somatic, body, and sleeping and resting between times.

In their simile they liken the sympathetic nervous system to the "mother of the household," who never sleeps, but mends the worn garments of activity during the night vigil, and therefore, has charge of the viscera, or visceral system.

While the similes stated are beautiful, the actual, anatomic facts completely refute them; for it goes without saying that there is but one nerve system, which is co-extensive with the entire organism; no part of which ever rests or sleeps, except in the short intervals intermediated between periods of great activity.

To make the statement in the last paragraph perfectly apparent, it will be recalled that all nerves have

origin in the cortex of the cerebrum and cerebellum, and extend in bundles, trunks or fasciculi to points near their endings, where they separate into small fasciculi, and finally end in individual nerves. These bundles or fasciculi form ganglionic plexuses at places where they must change their fellowship, or, in other words, where individual nerves are rearranged, and not elsewhere.

The primary, ganglionic plexuses occur in the medullary center of the two departments of the brain, called the cerebrum and cerebellum, and have been named the caudate nucleus, insula, claustrum, lentiform nucleus, thalamus, dentate nucleus, and so on.

It will be observed that the names just used are not the names of brain structures, but are names of ganglionic plexuses incident to nerve distribution, which further on in nerve rearrangement, are called crus cerebri, peduncles, pons varolli, medulla, cranial nerves, vertebral cord and intervertebral nerve trunks.

The pons and medulla are ganglionic plexuses for the rearrangement of nerves extending to the cerebrum and cerebellum, and nerves extending to the apparent origins of the twenty-four cranial trunks. The so-called spinal cord is a series of gangliaform plexuses for the rearrangement of nerves primarily to the formation of continuous commissures, and the rearrangement of nerves and nerve fasciculi to compose the apparent origins of so called spinal nerve roots, which unite just inside of the foramina to form the thirty-one pairs of intervertebral nerve trunks. Just outside of the intervertebral foramina, the intervertebral nerve trunks divide into three primary branches, two of which are paramountly arranged to ramify somatic tissue, but

incidentally visceral tissue, and the third to particularly ramify the viscera but incidentally to ramify somatic tissue.

These three primary divisions have been lamely designated in anatomy as the posterior primary division, the anterior primary division, and the white rami-communicans, but it is perfectly clear that they are all part of just one nerve system, and that the areas of their ramification is only a matter of economy, and does not serve to make them different kinds of nerves. They are distinctly the dorsal primary division, ramifying generally the dorsum; the lateral primary division, representing the serial ramification, intercostally and muscularly in a general way, of the sides and ventral walls of the trunk with certain incidental visceral ramifications and the visceral primary division, in the cavity of the body, entering into a comprehensive rearrangement to ramify the viscera with incidental somatic ramifications,

The visceral primary divisions of the intervertebral nerve trunks first construct or compose the gangliated, plexiform cords, that have heretofore been known as " the sympathetic trunks."

Those who named this remarkable visceral rearrangement, " The Sympathetic Nervous System," and those who still entertain the idea that these nerves are separate and distinct from the so-called cerebro-spinal system, overlook several important facts:

(1) That the entire, ganglionic and plexiform trunks are composed from branches called the white rami-communicans, from the so-called cerebro-spinal system.

(2) That each visceral nerve department and ramification corresponds definitely to the arrangement of

the primary lateral division, usually referred to as the intercostal somatic trunks.

(3) That the cervical, intervertebral trunks send their visceral contributions up inside the duramatral theca, classified as spinal accessory nerves, which, at the jugular foramina enter the sheaths of the pneumogastrics, and thus descend ventral to the vertebral column, to ramify cervical and thoracic viscera and somatic structures.

(4) That substantially all of the twenty-four cranial nerve trunks send off branches to ramify viscera as well as somatic structures, which also undergo ganglionic and plexiform rearrangements in accomplishing that result.

(5) That after the rearrangement through the ganglionic, plexiform, visceral trunks of the splanchnic region, certain of the nerves extend back through the intervertebral foramina to ramify both the visceral and somatic structures, and in many instances to ramify somatic structures *per se*.

(6) It is not denied that the vasomotor system, incident to the cavity of the trunk, is quite generally supplied from the so-called visceral system of nerves, but it can not be contended that blood and lymph vessels in somatic structures are visceral tissues.

(7) That much of the viscera of the trunk cavity are ramified by nerves extending to them directly from somatic ramification, and this is particularly true of nerves from the lumbar and sacral, somatic plexuses.

(8) Generally the cranial trunks are classified as somatic nerves, yet it is well known that to a very large extent contributions from them ramify viscera, and are

rearranged through ganglionic plexuses for the purpose of doing so.

From what has been said it must be apparent that there is just one nerve system, although distributed, for convenience, in several peculiar ways, just as the cerebrum is placed in one chamber, and the cerebellum in another, for convenience and economy; the two being capable of acting as a unit, and constituting but one brain.

The tenacity with which the old-time physician, and even those calling themselves orificial surgeons, cling to the thought of a separate and distinct "cerebro-spinal and sympathetic nervous system," finds its explanation in the fact that they are not aware that they can explain the remarkable phenomenon—orificial abnormality—upon any other basis. This conception, however, is wholly erroneous, for the existence of two nerve systems is not in any sense necessary to the elucidation of orificial abnormality.

TISSUE SITUATION

It must be understood that orificial abnormality is based upon two definite and specific situations; (1) injuries to tissues of orifices, and (2) anomalous formations of orifices. However, before either of these situations can be intelligently discussed pathologically, it must be understood that the normal state of rest of all of the true orifices of the body is in tonicis.

To explain the statement in the last paragraph, it is the normal conduct for each tube, ending in an orifice at the surface of the body, to be closed when not in function, and that while its sphincters are tonic they are nevertheless at rest in that condition.

It is fundamental that if there is an intrusion within the grip of the sphincters of an orifice, or within the lumen of an orifice, that the sphincters will not rest until the removal of that substance.

If the intruder can be expelled, the sphincters and orifice undergo normal, restful closure, and the structures and nerves ramifying them are at rest. If, however, the intruder cannot be expelled, the sphincters continue to squeeze to accomplish that purpose; the nerves are irritated, motor reaction occurs along the path of the nerves involved clear back to their cortical origins.

It must be explained that the sphincter muscles, and the nerves controlling them, have no way of knowing whether the substance can be expelled or not. It is their business to expel all intruders, or work to that end until exhaustion occurs.

This friendly conduct, under various phases becomes an irritant, causing much and many phases of abnormality.

ORIFICIAL INJURY

Injury to the orifices, of course, are part of the history of the person, and may be very pronounced in their irritation, and consequent production or increase of abnormality.

The class of injury referred to in this connection is laceration, particularly of the cervix of the uterus; laceration of the perineal body; rectal lacerations and laceration of the hymen.

In all these characters of lacerations, in an attempt to recover from the wounds, scar tissue is formed, which is

in the way, and never permits the sphincters to close the orifice normally and easily, but leaves the orifice always in a titillated state of irritation, resulting in hypertonicis of the sphincters, with marked motor reaction to the cardinal centers.

This subject should be widely discussed and illustrated, and it will be taken up in connection with many other themes, and the principle definitely carried out and illustrated.

It is sufficient, in passing to say that the irritation from injured orifices may be so great as, by the process of motor reaction, to gravely affect many different areas of the organism, but it will, of course, expend its most definite effects upon the digestive structures, the brain and tissues of the head incident to the quasi-cavities, such as the eyes, ears, nose, throat, etc.

ORIFICIAL ANOMALY

Under this heading the student must understand that there is included actual anomalous formations; mother's marks and congenital, abnormal formations, and for the purpose here to be discussed, these will need no differentiating or separate discussion.

It must be known that away and by far the greatest amount of orificial abnormality, and that of paramount importance, occurs as the result of abnormal formations of the orifices of the body, but particularly those of the sex organs.

Incident to the statement just made it is well known that continual titillation of the nerve endings causes a change in the vibration of those nerves, effecting a corresponding change in vibration in the cortical cells

of origin thereof, and it does not make any difference whether the nerves titillated are so-called sensory nerves, or so-called motor nerves, except that if the titillation occurs at the periphery of so called sensory nerves, the person is conscious of the irritation, otherwise not.

In this connection it must be remembered that primarily the entire functions of the human body, visceral, vasomotor and somatic, are carried on without any conscious volition on the part of the person, and are, therefore, carried on through the nerves of *tissue sense*, and that titillation of the periphery of the nerves of tissue sense, produce just as profound motor reaction as the titillation of sensory nerve endings, although in the titillation of tissue sense nerves the person is not definitely conscious of the irritation. Yet, notwithstanding the lack of knowledge of irritation, tissue condition and function in all of the areas of motor reaction will be rendered pathologic.

The so-called lower animals have no sex consciousness, and if we are to believe naturalists, the same thing is true of the savage jungle folk, and in any event, those animals and those people are not troubled with anomalously, or congenitally abnormal sex organs or orifices.

In the evolution of the human family to what is generally known as civilization, it became conscious of many things which formed no part of its conceptions in its earlier history.

In evolution, the human family had to learn how to meet and cope with all of the unfamiliar conceptions which were necessary to development of a civilized consciousness. Primarily, and basicly, the human family

became conscious of sex and sex relationship, and we have a way of saying that it was perfectly natural for them to place a peculiarly high estimate upon sex relation.

No matter whether we indulge that thought or not, the fact remains that sex was the first great problem in the development of civilization, and it is still the greatest problem that confronts the human family.

More time and money is spent in an effort to solve the sex problem; more sorrow and tears occur as incident to it; more disease and death occur because of wrongful conceptions and use of it, than all of the other problems which confront the human family.

Because of the facts just stated, and the further fact, that the problem is still unsolved, has caused, and now causes, the human family to make sex and sex gratification a social, instead of physiologic problem.

On account of the things just enumerated, for untold generations the human family has been too much centered upon the subject of sex, and because of this too great concentration, in a time before we had any reliable history of the human family, an hereditary tissue habit had been produced resulting in anomalous formation of sex organs in great excess over anomalies occurring in any other department of human reproduction.

As a result of the excessive concentration upon sex, the human family has produced, and is still the subject of, four marked phases of anomaly, which are fundamentally at the bottom of all orificial pathology, except only that caused by traumatic injury and the production of scar tissue.

The four anomalies referred to are the long or tight foreskin, and the small urinary meatus of the male; the hooded clitoris or the tight or adhered prepuce of the female, and the dogeared labia minora, sometimes called nymphae.

All of the anomalies mentioned are so old in their development that in Ancient Egypt it was at one time the custom to circumcise both male and female children generally, and for the same reason it still remains the custom of the Jews to circumcise all male children.

Without offering any criticism, it should clearly appear that these matters should not be controlled by religion, but that, for the sake of the evolution of the human family, circumcision of males and females should be performed only when the sex organs are anomalous.

Scientific and constructive attention to these all important matters would soon render circumcision unnecessary, because evolution in a few generations would overcome these adverse tissue productions. But until that evolution is accomplished, society will be compelled to cope with the phases of abnormality that flow directly from the three anomalies mentioned.

MALE ORGAN

The glans penis is the most highly sensitive structure of the male organism. To insure unit operation in the act of procreation the glans penis is ramified by nerves from all areas of the brain cortex.

Titillation of the glans penis changes the vibration of every cortical area, and, because of that fact reacts to every part of the organism.

The foreskin, in its construction to protect the corona

glandis, is really an orifice of a very important nature, and must be discussed from that standpoint. A long foreskin that goes clear over the glans, and as it were, closes in front, serves to prevent depuration of the thick mucous which exudes at the neck of the penis, and not only prevents depuration of that substance, but increases its flow, and, therefore, its accumulation.

In such situation the glans is kept too hot and moist, and in a certain sense much in the same situation as in copulation, so that there is a continuing titillation which amounts to irritation, and operates to arouse unusual and unnecessary emotion, ordinarily called sexual, but much better designated as sensual.

Many times the emotions aroused by such a condition as just described, are not sex emotions, but are misapprehended, and go into the extravagance of all fanatical phases, and very frequently cause the person to become possessed of absurd vagaries as to life, human relationship and so forth.

Oftentimes this character of reaction results in a morbid disregard of the opposite sex, and sometimes of complete loss of sex appetite, of social ability or disposition to engage in the normal affairs of life and living.

All too frequently, however, this continual titillation results in a constant and excessive sensual emotion and appetite; in boys producing that most destructive habit of masturbation; while in men it frequently urges on to those destroying indulgences which end in prostration and early decay, but, worst of all, frequently the incidental production of children not normally fathered, and, therefore, of a degenerate organism.

The tight foreskin, whether too long or not, has much

the same effect as that just described, and should receive the same careful attention as the long foreskin.

It is particularly the adverse motor reactive effects that flow from these conditions which should be discussed at length, and will be taken up in various subsequent chapters of this work. They must be passed at this time by the statement that from preputic irritation by motor reaction we have prostatitis, loss of sex power, hemorrhoids, pathology of the kidneys, suprarenals, liver, and other large digestive glands; thyroids, cervical lymph glands, tonsillar ring, and nasal, throat, ear, and eye disturbances.

Sufficient will not be said upon this subject until it is explained that any phase of abnormality or injury anywhere in the organism, will be increased or intensified by motor reaction occurring from a long prepuce or a tight one.

CIRCUMCISION

When either of the characters of foreskin heretofore described are present, circumcision is the only remedy, and this is a very artful operation, and if done at all must be done exactly right. Too much must not be removed, and too much must not be left. The correct method is to mark the skin on the outside so as to be of the proper length, and then incise the skin and the mucous membrane so that when they lie at rest, not being stitched, the cut edges are in apposition. These edges should be stitched with seven-day catgut, so that they will be kept in perfect relation until healing has been accomplished.

If this work has been done correctly the corona

glandis will be protected, and at the same time there will be no preputic titillation of the glans, and perfect depuration will at all times be accomplished.

If the meatus is too small, which sometimes occurs, it must be opened to normal size to secure normal conduct.

FEMALE ORGAN

The female sex organ presents many complexities which must be here carefully understood.

The female sex organ presents three principal orifices, which must be taken into consideration in our present discussion. These are: the orifice of the prepuce, the vaginal orifice, and the external os of the uterus.

The vaginal orifice may become a source of titillation and irritation by scar tissue formations within it, incident to a thick, tough hymen which, after being ruptured, forms carunculae or sharp-pointed nodules of a fungus nature, which serve to prevent it from closing in an undisturbed manner, or from tears in the walls of the vagina, or pathologic hardening of the walls.

The external os, and the cervical canal and internal os, of the uterus may become subject to the same character of irritation because of lacerations and the formation of scar tissue therein, which prevent normal and easy closure and rest, and may so roughen the external os as to cause it to irritate the vaginal walls, and to be irritated by the vaginal walls.

Either of the conditions last mentioned, when they are present, must be removed by extirpation of scar tissue, so as to secure smooth and normal healing of the parts, with the minimum of scar tissue.

However, these conditions are practically always incidental to an irritated clitoris, and will be more fully discussed with the detailed discussion of pathology of the sex organs.

GLANS CLITORIS

The clitoris has been truthfully called the "touch button" to the woman's entire organism. It is very small by comparison with the glans penis, but is as highly sensitive as that organ, and for the same reason.

The clitoris is ramified by nerves from all cortical areas in order to secure the unit co-ordination of the entire female organism in the act of procreation.

It will be seen, that irritation of the clitoris reacts specifically to all the other feetward orifices of the body, which are the vaginal, the uterine, the urethral, and rectal, and incidentally react to the kidneys, suprarenals, large digestive glands and stomach, and, therefore, to the entire intestinal tract, to the mammaries, respiratory organs and heart; to the head, throat, nose, ears, eyes and brain.

The same statement must be made here as in connection with the male; that irritation of the clitoris motor reacts to all parts of the body, and will serve to intensify any phase of pathology or abnormality of any kind or nature.

The foreskin of the clitoris is composed of a fine muco-skin from the labia minora, while the frenum is constructed from the crura or legs of the prepuce.

The anomalies that occur in this prepuce are the same as those of the male. The foreskin may be so long as to go completely over and close in the clitoris; or, not

being so long, it may be tight over the glans; or it may be adhered to the glans; or being short, it may be tight and may be adhered to the corona glandis relative to the neck of the clitoris.

Either of the anomalous conditions mentioned in the preceding paragraph serve to produce a continuing titillation amounting to irritation of the clitoris, not dissimilar to that of copulation, and very injurious to the whole organism.

The anomalous situations just described, frequently cause the female to be possessed of the most bizarre and unaccountable emotions; for it is well established that the female is more emotional than the male, and rightfully so, since each female is a potential mother of the race.

These emotions sometimes only render the woman panicky, subject to unaccountable fear, and fits of weeping; short periods of intense excitement, alternated by periods of intense depression. These conditions are frequently responsible for the emotion of self-destruction which occurs in such an unaccountable way so frequently in our modern woman.

In the remarkable, and bizarre phases just described, to which can be added an almost unlimited number, the woman is frequently unconscious that sex is in any manner connected. In other words, she does not know that she is being constantly irritated at the clitoris, because she was born with the anomalous situation, and has never known normal sex sensation.

Many times, because of such situations the woman's emotions partake of such a nature that she is rendered adverse to mingling with, and forming social relation-

ships with the opposite sex. She may form a positive repugnance to any thought of sex, or anything in connection with sex life; with conception and bearing of children and so forth. In other words, she may lose her womanly intuitions.

The author has known of cases of the kind just mentioned, where the woman had finally met a man for whom she had the highest respect and to whom she became a real friend, to such an extent that she accepted a proposition of marriage, but when the time for marriage approached, although an honorable person, she backed squarely out, and without giving any reason therefor, declined to be married.

Many such women have consulted the author, and in tears, and in the most tremendous agony have begged for a solution of their difficulties, demanding to know why they can not be as other women.

All too frequently, however, the anomalous conditions referred to increase the emotion to sensuality, resulting in the girl from early youth following the destructive habit of masturbation. The author has known little girls two and three years old to form this habit, and continue it until being taken off in early life by what is usually called "galloping consumption," or some other phase of degenerative abnormality.

Many girls thus anomalously formed escape the destructive effects of such emotion until they arrive at puberty, when they become possessed of a wild and insatiable, sensual appetite, which they gratify regardless of surroundings, conditions, education or culture. Here is the explanation of prostitution. The author has examined hundreds of prostitutes and never found one

who was not the subject of anomalously formed sex parts.

The pity of it is that such women do not know what is the matter with them, and therefore, live a life of self-condemnation, when they are not at fault, but the malformation of their sex body is wholly responsible for their conduct.

CIRCUMCISION

When either of the anomalies described, that is, the redundant foreskin, the tight foreskin, the adhered foreskin whether long or short, is present, there should be proper circumcision.

Circumcision of the female is indeed a very delicate and artful piece of work. The glans clitoris is very small, and the tissues are of a highly sensitive and delicate structure. However, such release and removal of tissue must be accomplished as will leave the glans clitoris, and especially the corona glandis and the neck, free and unobstructed, so that the rich, viscid mucous discharged in this area shall always find free escape, and so that the air can pass freely to all parts of the glans and neck.

In accomplishing circumcision of the female, great care must be observed not to injure the delicate frenum, nor to cut into the structures of the clitoris. Not too much, but just enough is again the rule of excision.

EXCISION OF THE NYMPHAE

The anomalous situation sometimes presented is that of a long, or voluptuous, labia minora, or labium minor. These structures are frequently presented so that upon being stretched down they hang out of the pudendal slit an inch to an inch and a half.

The labia minora are sometimes not so very long, but, because of anomalous conditions at the clitoris have, by motor reaction, been rendered hard and fibrous, so that they continually irritate each other, and the nerves of the sphincter structures above them.

Occasionally one labium is very large, long and dog-eared, the other one being entirely absent or very small. This results in a twisted and uneasy closure, with the delicate and irritable surface of the labium constantly exposed to irritation.

In either of the conditions just described, and in the multitude of other anomalous presentations of the labia minora, the delicate operation of reducing these to the proper size, and to symmetrical proportions, must be performed.

Excision of the nymphae is perhaps the most delicate operation that the orificialist is called upon to perform; for the labia minora, or nymphae, are composed of erectile tissue, and are incident in their functions with the vagina; and in their extirpation, therefore, great care must be taken not to abort, but to render their function normal.

Much more should be said to make this chapter complete, but the fundamentals of orificial abnormality have been stated, and the student must look to the disscussions of these phases of abnormality yet to be presented, for the details that, in an independent work, would be stated under the sub-titles of this chapter.

CHAPTER IV

MOTOR REACTIVE AREAS

Defined—Cardinal Areas—Incidental Areas.

Having reviewed the anatomic situation as it is detailed in the preceding chapter, the student is now asked to refresh his memory by the examination of the physiology of the nerve system as stated in the first book of this series, Psycho-Bio-Physiology.

As a further preparation for understanding what will be said in this connection, Chapter VI of the first volume of this work should be carefully read, which is entitled Motor Reaction.

Motor action is the normal or physiologic conduct of the organism acting in all of its parts without interference or impediment, and therefore producing positive conditions without undue concentration of force to any area.

Motor reaction is that phase of affirmative, abnormal conduct, wherein, because of irritation in excess of resistance, force from a wider cortical area is concentrated to the place of irritation primarily, and to other incidental centers, variously located between that place and the brain cortex.

The locus of irritation and the incidental centers between that place and the brain cortex are properly designated, "Motor Reactive Areas," because they respond in pronounced symptoms, when there is excessive irritation at the periphery of the nerves of that or those paths.

There are two well defined phases that may be presented in this phenomenon, which must be here stated in order to save students from being confused.

Ordinarily the nerves definitely ramifying a primary motor reactive area are occluded by vertebral disrelation, usually of the subluxation type, which of course means that less than normal stimulus is being transmitted through them, and therefore that so far as those nerves and the structures supplied are concerned, there is a slowing and coarsening of vibration with all of the sequences of such conduct.

The other nerves ramifying a motor reactive area, not primarily occluded by vertebral disrelation of the subluxation type, undergo irritation which serves to change vibration throughout the length of the nerves, back to the area of the cortex from which they have origin, resulting in tissue hypertonicis from the cortex to the endings of such nerves.

The nerves interramifying in an area affected by an irritant primarily and incidentally from the standpoint of origin, comprehend a somewhat extensive cortical scope, which is very much greater than that of the cortex which gives origin to the controlling or dominant nerves directly responsible for function in that tissue area.

It is because of the facts just stated that the declaration has been repeatedly made, that in affirmative pathology motor reaction results in a greater force from a wider cortical area being expended upon the tissue area of irritation and parts immediately related thereto, as well as incidental tissue areas between that and the involved brain cortex.

THE CARDINAL AREAS

The lack of absolute knowledge at this time as to the exact arrangement and plan of rearrangement of that part of the nerve system which therapy has called the "Sympathetic" but which is correctly styled the Visceral System makes it impossible to state authoritatively just why the cardinal motor reactive areas are at the places we find them, and the same applies to the incidental areas.

The locations of the motor reactive areas, as they are to be stated in this chapter have been ascertained by the long and very comprehensive clinic experience of the author, corroborated and sustained by the practice experience from numerous clinic reports, and are believed to be practically exact.

The cardinal areas are those which under specific irritation are always hypertonicised and are therefore the pronounced centers of columnar constriction, usually accompanied by fixation and are the places frequently mistaken for "major subluxations," whereas they are usually only tissue distortion by constriction.

The areas under discussion are those which would symptomologically manifest themselves under specific and continuous irritation of the periphery of any nerve path, trunk, bundle or gangliform plexus, of or connected with nerves from the trunks of the more feetward part of the cauda equina, that is to say, the fourth lumbar pair and those below them in a vertebral column conceived as being free from subluxation.

It will be truthfully suggested that there are no human columns without subluxation, but it must be rememberd that the diagnostician or Chiropractic Analyst must be

able to mentally construct each column examined, free from subluxation before he is able to detect a subluxation and appraise its gravity, and he arrives at the cardinal motor reactive tissue areas in precisely the same manner.

The cardinal areas of motor reaction are: the Sacro-Iliac; Lumbo-Sacral; Thoraco-Lumbar; Seventh Thoracic; Fourth Thoracic; Eighth Cervical; Fourth Cervical and Occipito-Cervical.

The Sacro-Iliac area includes the tissues of those articulations and the aponeuroses and musculatures of the relative Iliac fossae, both dorsal and ventral including the Psoas muscles.

The Lumbo-Sacral area includes the joints between the sacrum and fifth lumbar and the joints between that segment, and the fourth lumbar, with the soft tissues of the area having origin from, or insertion into the headward aspect of the sacrum and ilia.

The Thoraco-Lumbar area includes the joints between the eleventh and twelfth thoracics and those at the heads of the respective ribs, together with the aponeuroses and muscles involved, and also the joints between the twelfth thoracic and first lumbar with the aponeuroses attached thereto, together with the crura of the diaphragm, psoas muscles, and the quadratus lumborum of both sides and the relative structures necessarily affected.

The Seventh Thoracic area consists primarily of the joints between the seventh and eighth thoracic vertebrae; but also includes the joints between the seventh and sixth, the joints between the heads of the sixth, seventh, and eighth pair of ribs with those vertebrae,

as well as the joints at the necks of those ribs with the six transverse processes involved, together with the intercostal muscles of those ribs and all of the structures of the immediate dorsum.

The Fourth Thoracic area consists of the joints between the fourth and third and the fourth and fifth thoracics, with the joints at the heads and necks of the respective ribs, the intercostal structures, the aponeuroses, and the dorsal muscles immediately attached and involved in the area described.

The Eighth Cervical area consists of the joints between the seventh cervical and first thoracic vertebrae and the seventh and sixth cervicals, also including the joints between the heads of the first and second pairs of ribs and the first thoracic vertebra, and the joints between their necks and the four transverse processes, which incidentally includes the second thoracic vertebra in this area, together with the aponeuroses and muscles attached within the area, or immediately affected from it.

The Fourth Cervical area consists of the joints between the fourth and third, and the fourth and fifth cervicals, together with the aponeuroses and muscles attached in the area and immediately effected from it, in which prominent mention should be made of the scaleni and sterno-cleido-mastoid muscles.

The occipito-cervical area consists of the two condyloid joints between the occiput and atlas, the four joints between the atlas and axis and the three joints between the axis and the third cervical, together with the aponeuroses and structures attached thereto and to these vertebrae, as well as those affecting this area attached to the occiput.

The areas just described are at the locations detailed and consist of the structures as stated, because motor reaction, operating from the feetward aspect of the visceral nerve system, without incidental interferences, functions to the production of very definite hypertonices of the soft or quasi-soft structures composing these areas.

The reason motor reaction, from irritation operating from the feetward aspect of the visceral system, causes definite constrictions in the areas stated, is because certain nerves from the visceral trunks after being rearranged through the ganglionic plexiform trunks of the visceral system, extend dorsally in small trunks, which were formerly called " gray rami communicans " and become somatic nerves by ramifying the tissues just described.

The reason that unusual force peculiarly centers to the areas as described, is to be accounted for in two ways; first, because of the characteristic anatomic grouping or aggregations of ganglia in the visceral system, and second and paramountly because of the bilateral, dorso-ventral curves of the body, including the remarkable muscular arrangement, constructed and mechanically arranged to comply therewith.

INCIDENTAL AREAS

The incidental areas of motor reaction are manifested, not because of any changes of the scheme of nerve arrangement, but because of the following things: first, a different place of irritation; second, idiosyncrasies of construction; and third, distortions.

First: if the place of irritation is changed, the motor

reactive areas are effected accordingly, that is to say, as the areas of irritation go headward, the feetward motor reactive areas in ratio are undisturbed, for motor reaction operates affirmatively headward and only negatively and slightly feetward, except as a cumulative proposition in a final, constitutional condition.

In thinking of the proposition just stated, the student is cautioned that the statements of the last paragraph are based upon the thought of the test being made upon the same structural attitude, that is to say, with the same person, for two cases apparently alike would nevertheless differ in attitude to some extent.

To illustrate the proposition laid down, if the place of irritation is at the ending of the thoraco-lumbar nerves, that will be the first motor reactive area affected and with the ideal figure mentioned, the areas headward would all in ratio be affected.

If the irritation is at the endings of the nerves from the fourth thoracic motor reactive area, then those feetwardly will be skipped, but all headward to that place will be in ratio affected.

Second: idiosyncrasies of construction enter largely and importantly into the subject being discussed, and the diagnostician must carefully examine for symptoms of these in each case, before he can appraise the gravity of the situation.

No effort will be made to point these changes out in detail, but only to give the student the key to the situation in order that he may work each case out successfully, and for that purpose it will be necessary to give some illustrations.

In a case where there are six lumbar vertebrae and

only eleven thoracics, the center of the motor reactive area will be at the first lumbar trunks instead of the twelfth trunks, which is the usual construction.

If there are but four lumbars and thirteen thoracics, then the center of the motor reactive area will nevertheless be at the twelfth thoracic trunks, but the first lumbar trunks will be excluded from the area, in other words there will be in such a case no lumbar trunks in the area, but the twelfth thoracic motor reactive area will consist of the twelfth, eleventh and thirteenth pairs of thoracic trunks. This situation will not serve to make changes in the areas headwardly.

If there are the regular number of lumbars, but only eleven thoracic vertebrae, the center of the motor reactive area will be largely at the eleventh thoracic trunks, but the first lumbar trunks and tenth thoracic trunks will be definitely included in the motor reactive area, while the second lumbar trunks will be only incidentally included.

Changes in the number of nerve trunks in the cervical region make the same characteristic differences in the location of the centers, of the motor reactive areas, as those already described in the thoraco-lumbar area, except, that the student must know that no changes of the kind described influence the location and scope of the occipito-cervical area.

Third: distortions affect the areas of motor reaction, not because they change their nerve or ganglionic location or anything of that kind, but because they change the pull of the structures, which should be controlling and are usually controlling in such areas.

Only a few illustrations of the change of the centers

of motor reactive areas, because of distortion, will be sufficient to make the whole field clear to the student of anatomy, for the distortions of each area and its general and specific structural effects have been carefully pointed out in Relatology in the first volume of this work.

If the case presents an apex ventral sacrum with a lordosis at kidney place, which is usual in such conditions, the lumbo-sacral area will be skipped, and operates with greater intensity over the headward aspect of the thoraco-lumbar area, or to be exact, in a case presenting the normal number of nerve trunks, over the eleventh thoracic as a center of the motor reactive effect.

The situation just outlined serves to lessen the effect at the seventh thoracic, but not to wholly skip it, and intensifies the effect at the fourth thoracic area, carrying the center of motor reaction headward so as to definitely include the third thoracic trunks, thus sometimes making the third trunks, really the center instead of the fourth which is usual.

What has just been described causes motor reaction to the cervico-thoracic area to be greatly lessened, although not completely skipped, but serves to intensify motor reaction to the fourth cervical area and to definitely include the fourth cervical trunks as the center of the area instead of the fifth, as is regular.

The student will understand that, while the occipito-cervical is always a motor reactive area, in any phase of affirmative pathology the center of which remains unchanged, yet it must be remembered that the effect is always intensified by distortion which gives a tendency to the headward cervicals to disrelate ventrally.

If the sacrum is base ventral, the lumbo-sacral motor reactive effect will be intensified, usually centering more to the fifth lumbar trunks, but not always so, for this depends upon the size and form of relative holding structures, the breadth of the base of the sacrum and the ilia, and also the length of the crests of the ilia.

If the sacrum and ilia are broad, but the crests of the ilia are short, then the center will be about equally distributed to the fourth and fifth lumbar trunks, but if the crests of the ilia are long, then the motor reactive center will be definitely at the fourth lumbar trunks.

On the other hand, if the sacrum and ilia are narrow and the crests of the ilia are short, the reactive center will be at the fifth lumbar trunks but in such a case, if the ilia are very long, the motor reactive effect will be definitely at the fourth and third trunks, and the center in extremely long ilia may even be at the third lumbar trunks.

In case of a broad pelvis with short ilia the center of the thoraco-lumbar area is at the twelfth thoracic trunk, but with long ilia the center is at the eleventh trunks, and in the narrow pelvis, with extremely long ilia the center is carried up so as to include the tenth pair of trunks more definitely than the eleventh.

If the distortions as outlined serve to intensify the motor reactive center to the fifth lumbar and twelfth thoracic, then the seventh thoracic, and the eighth and fifth cervical centers will be intensified as will also the occipito-cervical.

On the other hand, if the distortions serve to bring the motor reactive centers in the lumbar region headward so as to definitely include the third lumbar trunks,

then the centers headward, will be intensified at the fourth thoracic and fourth cervical trunks and the suboccipital, but will be lessened at the twelfth and seventh thoracics and the eighth cervical trunks.

The statement herein is brief, but is sufficient to lay down and illustrate the rules governing the motor reactive centers and to illustrate their incidental changes.

CHAPTER V

PHASES OF DISRELATION

Simple Disrelation—Strain—Sprain—Contusion—Bruise

Having analyzed the proposition of disrelationship in the preceding chapter, it is now necessary to discuss the symptoms arising therefrom, and to detail certain of the effects that are expressed in function.

The gross disrelationships that occur may be well classified under the following terms; simple disrelation, strain, sprain, contusion, and bruise, as representing those not expressing complete separation; laceration, tear, cut and disintegration as representing those expressing complete separation; and subluxation, luxation, and fracture as presenting the culmination of one or a combination of the others.

It will be seen that each injury named in the preceding paragraph is only a phase of disrelationship, and indeed that *all disease consists primarily in disrelation.*

It will also be seen that it is impossible to discuss generally the multifold symptoms that arise from disrelationship. Such a discussion would resolve itself into a recounting or detailing of every possible symptom of disease that may arise.

To detail each of the symptoms that may arise from disrelationship would furnish to the student nothing of assistance or value, because it would not give him the means of understanding the situation, and therefore,

would fail to point out the way to overcome the difficulty.

The much better plan is to discuss the symptoms of disrelationship as they appear in this chapter; having the student to understand at this juncture that each symptom of disease is a symptom of anatomic distortion.

SIMPLE DISRELATION

The symptoms declaring simple disrelation may consist in many things. The fact may be declared by pain, congestion, swelling, redness and so forth, or it may only be declared by appearance.

The most difficult disrelation to isolate is the one that exists without affecting the consciousness of the individual to the production of any discomfort.

A disrelation that does not produce discomfort or discoloration, can only be detected by observing conduct or by feeling, and in this particular, sight and feeling must be directed in the investigation by a most complete anatomic knowledge.

The preparation for detecting simple disrelation is a very specific conception of the form, size and conduct that the tissues under investigation should present, and then a most careful comparison of the tissue in which it is observed, with the relationship which it should sustain in its image, ideal or normal form and relation.

Just at first it would seem quite difficult to attain to such knowledge of anatomic structure as to be able to detect without difficulty the deviation of a part therefrom by an examination of an organism that had not been seen before. Yet a little definite thought upon this proposition will cause the imagined difficulties to disappear almost wholly.

It is true that the types of structure presented are multitudinous, and it is true that no two human beings present the same part in exactly the same shape, and while that is true, yet there are typical similarities of structure, and the detection of these is not difficult to attain. And then, it must be remembered that there is a sort of intuitive perception that may be cultivated and raised to the power of visualizing what the actual form and relationship were intended to be, if maturity has not yet been attained, and are, if maturity has been attained.

In any event the primary symptom of disrelationship, or so-called displacement, is the effect of change of some part or parts from the relation which they should sustain.

The difficulty of detecting the symptoms, it must be remembered, does not change the symptoms, for the facts remain whether the examiner can detect them or not, and it must be remembered that disease could not occur without the primary symptom consisting of displacement at the present being considered under the title of simple disrelation.

The task of detecting simple disrelation is the most difficult one with which the student of Chiropractic is confronted. All of the other things that appertain to his work as a Chiropractor are easy and in a sense perfunctory, but in isolating the symptoms of disrelation he meets his most difficult problem, and therefore finds in the solution of the problem his most important task.

The thoughtful student will find the problem of reading the symptoms of disrelation very greatly simplified when he applies the work to a given structure. To

contemplate the work in the abstract gives it a setting altogether out of proportion with its actual difficulties, and yet it must be remembered that the ability brought to a very high degree of detecting symptoms of disrelation is the most superior quality that the Chiropractor can possess.

STRAIN

Strain is a simple form of distortion of a little graver type than that which has just been referred to as simple disrelation.

The tissue injury called strain exists when the resistance of a tissue has been slightly overcome.

The word strain has so frequently been applied to the appendal muscles of the body, that when the word is mentioned one's mind reverts immediately to the wrists or ankles, or some such part, but such thinking is entirely too limited. Strain applies to any structure of the organism.

One may eat so excessively as to strain the tissues of the stomach, liver, pancreas, intestines, etc. He may run, and so unusually exercise the respiratory apparatus as to strain it. He may use his muscles in a manner different from ordinary, and strain them.

The symptoms arising from strain are usually simple, and are a sense of pain or soreness with hypertonicis and rigidity of the part, and therefore, a sense of inability to use the part in the ordinary manner.

SPRAIN

Sprain is a tissue injury of a little more gravity than that of strain, for in sprain there is always the fact of

the structures being actually to some extent separated.

It is not necessary in order that sprain may exist that the longitudinal fibres shall be actually separated, but they must have been elongated at least as to some area to some degree of separation of their cells in excess of that of strain, and the tissues binding these fibres together must have been interfered with to the degree of partial separation.

Usually in sprain some fibres are torn apart, or torn loose from their attachments either of origin or insertion, or the fibres of the sprained structure are torn apart by distension.

In any event sprain is the result of the resistance of tissue being more definitely overcome than that of strain, and sprain is to that extent always a permanent injury.

The symptoms of sprain are very similar to those of strain, except that the sense of soreness is greater; the inability to use the structure is more pronounced, and usually the congestion and inflammation is more intense, and constriction and fixation incident to the injury more grave and pronounced.

It must be remembered that sprain also applies to any tissue of the body, for in connection with sprain we are prone to think of tendons, ligaments, and so forth, when as a matter of fact any structure of the body may be the subject of sprain.

However, the symptoms of sprain are of peculiar value to the Chiropractor when the subject is directed to the joints of the human organism, for it is in the joints of the organism that sprain exercises its paramount injury, and expresses its prominent symptoms, and it is

primarily the correction of joints that the Chiropractor must understand, while it is true that he must know the symptoms of sprain anywhere in the body, and must understand the proper address to such sprains, as well as to those of the holding elements of joints.

CONTUSION

A contusion partakes of the nature of both strain and sprain. It is both, with the additional distortion by a sudden and violent pressure of such nature as to disrelate the cellular structure of the area.

Contusions may occur in any locality of the body. They may as easily be produced in the deep tissues of the body as in the appendal structures. However, contusions generally occur upon the surfaces of the body, because the surfaces are more easily and frequently exposed to sudden application of force beyond the resistance of cell elements.

The symptoms arising from contusion are very similar to those that have already been given as to strain and sprain. However, contusion is a graver injury than either of the others, and the element of pain is usually most pronounced and occurs as incident to congestion and swelling with superheat.

In addition to the symptoms already given, which also include hypertonicis and fixation, there is that of discoloration, which never occurs in simple sprain.

In this particular, much error has been indulged in regard to sprains. It is generally supposed that a sprain presents discoloration, but it does not do so. When there is discoloration in what is supposed to be a sprain it must be understood that the discoloration is

proof of contusion. In other words, in such an injury there is sprain with contused areas.

BRUISE

A bruise is an injury not in any sense differing from contusion. Bruises may occur in any part of the organism, and present precisely the same symptoms that have been discussed in connection with contusion, except that of discoloration. A simple bruise presents no discoloration, except redness occurring as incident to inflammation.

The correction of distortions described in this chapter must be taken up under the immediate subjects to which they are related.

Simple disrelation, it will be seen, goes so widely into the tissues of the body that to discuss correction of it in detail would be to discuss each and every symptom of abnormality that can occur, no matter of what nature or to what extent.

Such a discussion would be wholly without benefit to the student, because it would lead him into a maze of irreconcilable things.

Correction of simple disrelation, therefore, will be discussed in connection with articular, skeletal tissue, and visceral distortion.

Strain will be discussed in connection with the various tissues in which that phase of pathology occurs, and will frequently be discussed in connection with bruise, contusion and sprain, so that it need not be further addressed at this place.

Sprain, being a graver character of abnormality of the same kind as strain, will be discussed in connection

with phases of disrelationship, but will be discussed most carefully and particularly and in great detail in connection with the holding elements of the joints of the body.

While sprain will be more particularly discussed in connection with the joints of the skeletal body, the student must not overlook the fact that sprain is as frequently and as painfully connected with injuries to skeletal structures such as muscles, ligaments, tendons, cartilages, etc., as in connection with joints.

It should also be remembered that sprain is frequently a deep seated injury, and pertains to viscera. Sprain and laceration are responsible for floating and movable kidney, and for many phases of distortion of portions of the intestine, liver and the glands generally. Disintegration as the result of sprain is frequently the producing phase of adverse conduct that enters into ptosed viscera.

It is in connection with the subjects of subluxation and luxation, and incidentally fractures, that sprain meets with its more usual and prominent phases of discussion.

The student must bear in mind that there is in connection with strain and sprain the analogy of laceration and bruise, and in these aspects these injuries must be corrected just as those injuries are.

However, discussion of these phases will be postponed and taken up in their relationship to the subjects mentioned.

CHAPTER VI

PHASES OF DISRELATION

Laceration—Tears—Cuts—Disintegration—Enlargement

The phases of disrelation so far considered have been those in which the tissue elements were not wholly separated, but were, because of destruction of certain cells, partly separated.

We must now turn our attention to a discussion of the symptoms arising in those cases in which the paramount injury is a complete separation.

LACERATION

There is very little difference between laceration and a tear. However, there is conceived to be some slight difference, mostly in the style of the wound.

Laceration is a condition in which the structures are separated by force, leaving rough edges.

Lacerations upon the surface are not difficult to observe. Indeed they may be easily observed either with the eyes or by palpation. It is lacerations which occur in the deep parts of the body that are baffling.

In many cases the external symptoms that tend to establish deep or internal laceration, are bleeding or hemorrhage. But again, internal bleeding or hemorrhage may occur from many things other than laceration.

Usually, however, accompanying laceration the patient undergoes a sense of very great weakness, and that is especially true of the part in which the laceration has occurred.

Deep seated lacerations, unless they are sufficiently grave to sever large blood vessels, usually heal if the patient is kept quiet, and in such position as to take weight or pressure from the part involved.

Of course, before pressure can be successfully removed, the location of the laceration must be ascertained by the symptoms of pain, dizziness, and lack of strength, and then the parts should by delicate corrective movement be placed as nearly in proper relation as possible from the outside, and the patient kept as nearly still in that position as possible, until intention has taken place.

To aid this process accessory bandaging, so placed as to assist in holding the parts in relation is always indicated. Where large arteries and veins are torn apart the instant intervention of surgery is indicated and is imperative.

TEARS

To all intents and purposes tears are the same as lacerations. It is generally conceived that tears are more symmetrical than lacerations. However, the symptoms are identical, and what has been said about lacerations applies equally to tears.

In surface tears and lacerations great care must be taken that the edges of the severed parts shall be placed in perfect apposition, and then held in that position by adhesive bandage, or other characters of bandage with proper drainage arrangements, where that is indicated, until the parts have united.

CUTS

Cuts only differ from lacerations and tears in that

they are produced by sharp instruments. The edges of a cut, then, are comparatively smooth, having been separated by a sharp-edged instrument. Of course, there are no deep or hidden cuts in the body that do not communicate to a surface, and therefore, the symptoms of deep cuts are always very apparent, and comparatively easy of location.

In attending to cuts the same rule should be followed as already indicated in lacerations and tears. That is, the surfaces of the cut should be placed as nearly in perfect apposition as possible, and then be stitched or held together by other appliances until healing has had time to and has taken place.

In lacerations, tears, and cuts it is of the utmost importance that no greater interference with the wound shall occur than is absolutely necessary under the circumstances. If the laceration, tear, or cut is clean; that is to say, if no foreign substance is in it, it should be dressed in its own blood, and so wrapped up and protected from the air and sun.

If such a wound has foreign substance in it, which is of a nature that it can be washed out with the flow of blood from the wound itself, that is the correct method to pursue. When it is thus cleansed, it should be dressed in its own blood.

No antiseptic should be used in a fresh wound for any purpose whatever except where a foreign substance has entered it, which can not be washed away in the blood from the wound itself. Of course, it will be understood that such substances are very few, for there are very few substances that are more cleansing to a wound than the blood from the wound itself.

In this connection the author suggests that infection of wounds is as frequently produced in the surgical attempt to cleanse by the use of antiseptics, as those which result from poisonous, foreign matters being left in the wound.

DISINTEGRATION

There are two phases of disintegration: (1) physiologic disintegration, and (2) pathologic disintegration.

Physiologic disintegration is that continuous separation of particles of matter that have been cohered into animate cells, because of chemical changes incident to continuous vibration and friction which is peculiarly incident to animation.

When a particle of cell element by such vibration and friction has changed its chemistry sufficiently, it loses cohesion, and its place is occupied by another particle of right consistence being cohered in the process of assimilation.

It will be seen that without this character of disintegration it would be impossible to keep the organism virile and well.

Pathologic disintegration is that phase of conduct in which the production of abnormal chemistry is so great that cell elements are failing of cohesion more rapidly than their places can be filled by the process of assimilation.

In such a situation as just outlined the tissue involved is actually losing its size, shape, color, and consistence. When the disintegratory process has continued in a muscle, organ, or part sufficiently long, the process is called atrophy, but it is the incipient

phases of such pathology to which the attention is here being more definitely directed.

The symptoms of pathologic disintegration, then, are always a lessening in the size of a part from the normal, and such lessening of size is always incident to an abnormal process.

The rapid reduction of excess fat is a process of disintegration of course, but it is not the character of disintegration that we are discussing here, for it is not pathologic, but is tending toward the normal size.

Pathologic disintegration is always a process occurring in a structure which actually reduces that structure below, or to less than, its normal size.

Size, shape, and color are paramount factors in the symptoms of disintegration. They may be detected by palpation, and symptoms may be detected by sight, and palpation and sight are frequently aided by smell, and incident to deep tissue disintegration palpation may frequently be aided by hearing through the means of percussion.

Disintegration, being a pathologic process, the only means of correcting it is by removing the cause of the disintegratory process. This is accomplished by locating occlusion of nerves to the area, and removing that occlusion by proper relating.

ENLARGEMENT

Enlargement is a process that presents two phases: (1) physiologic, and (2) pathologic.

Physiologic enlargement primarily includes growth, for, of course, all parts undergo enlargement in the process of growing, and within a certain scope the

physiologic process also includes accumulations of flesh.

In the accumulation of flesh the physiologic line of demarcation is reached at the full development of the image after which the individual is patterned. Adding flesh beyond full development carries the process over into the pathologic, and flesh so added is always abnormal—always pathologic.

Pathologic enlargement occurs in all that character of tissue produced beyond the full development of the image after which the individual is patterned, and to understand this limit it is necessary to make a very careful study of the characteristics of the formation of the person, and to approximate the size, character of tissue and full development from this investigation. Any enlargement beyond that is pathologic.

The enlargement to which attention is more particularly directed here, however, is that which is produced by that phase of pathology in which giant-cell structures are formed. These include all fibrous or fibroid growths.

Fibroid growths will be discussed later in this work in a chapter by themselves. The attention here is directed more particularly to those non-malignant giant-cell productions which occur many times in soft tissue, but frequently occur in the denser tissues of the body, such as muscle, tendon, cartilage, and the like, but more particularly reference is made in this connection to giant-cell production as incident to joints, which interfere with the machinic operation of the skeletal structure of the body.

Enlargements of any character present their symptoms primarily in changes of size, shape, color and relation.

It must be remembered that enlargements, also present symptoms because of interference with articulation of joints, and by distorting nerve trunks in any part of the body, causing occlusion and the train of adverse symptoms that follow occlusion at the endings of the nerves involved, and by congestion, pain, frequently inflammation, and other phases of disturbance.

The symptoms of enlargement, then, are detected primarily by palpation, and measurements, frequently aided by sight, and sometimes also by smell.

Enlargements generally reduce when occlusion of stimulus to the area is removed. However, frequently their structure must be reduced by direct breaking down of their giant-cells, by the application of well applied and graduated force.

CHAPTER VII

SUBLUXATION

Subluxation is disease.

A subluxation is the result of sprain, laceration, contusion, disintegration or enlargement of the holding elements of a joint whereby the articular surfaces are not held in normal apposition.

Either of the five injuries referred to in the preceding paragraph is sufficient to produce the result called subluxation, and of course any combination of those five injuries may combine to the production of a subluxation.

Subluxation is, of course, always a phase of disease that applies only to the joints of the skeletal body.

There are more than three hundred joints in the human anatomy, and subluxation applies to each of these.

It has been the habit of Chiropractors to apply the word subluxation to the joints of the vertebral column only, but there is no reason for such use of the word. Subluxation is possible and occurs in any joint of the body.

It is true that subluxation of vertebral joints is a more far-reaching injury than subluxation of appendal joints, because of the relative influence such injury has upon the nerve system. But so far as the injury or disease itself is concerned, subluxation of a vertebral joint is no worse than subluxation of an appendal joint.

The symptoms of subluxation are too many and varied to admit of inventory. They are as numerous as the symptoms of simple disrelation, and a consideration of them in the abstract would be of little or no value to the student.

However, the symptoms of subluxation fall into a general classification, and the subject is thus rendered simple and easy of analysis.

Fundamentally and primarily the phase of subluxation comprehended under the sense of disrelation or simple displacement must be isolated, recognized and pointed out by the process of palpation.

In this sense the process of palpation consists in a comparison of the various parts of the body sufficiently to form a conception, first of the image after which the organism being examined was patterned, and second to discover its articular digressions from that image.

However, the means stated would go no further than to detect simple disrelation, and does not furnish a means of distinguishing simple disrelation from that phase of disease properly falling within the scope classified as subluxation.

Simple disrelations occlude nerves, and sometimes as gravely as do subluxations. Therefore, palpations and comparisons which lead to the disclosure of disrelation only, are not sufficient to detect subluxation.

It must also be remembered that occlusion of nerve stimulus by joint disrelationship does not by any means prove the existence of that phase of disease called subluxation, and in fact occlusion of stimulus, while it is one of the symptoms of subluxation, does not by any means establish the fact of subluxation any more than it establishes the fact of simple disrelation.

To trace the symptoms of subluxation, then, requires going further and more deeply into the subject than merely to ascertain that there is disrelation or distortion of joints, whether of the vertebral column or otherwise.

The paramount fact of disease, called subluxation, is that there is always the element of permanent injury entering into it. It is true that the permanency of the injury may be greatly ameliorated, and to a very large extent overcome, but subluxation can never be wholly overcome.

There will always be scar tissue remaining as a symptom of that phase of disease or injury constituting subluxation.

The symptoms, then that declare subluxation are those which establish the fact that there is in the joint under consideration either sprain, laceration, contusion, disintegration, enlargement, or a combination of two or more of these phases of injury, in the tissues of the holding elements of the joint to such extent that the joint surfaces are not held in normal apposition.

The holding elements of a joint are the cartilages, ligaments, membranes, tendons, aponeuroses, muscles, and so forth, which to any extent or in any degree, aid in holding the articular surfaces of the joint compounds in normal joint relationship.

It will be seen, then, that sprain of a cartilage, ligament, tendon, aponeurosis, membrane, muscle or any tissue that acts as a holding element of a joint to such an extent that it fails to fulfill its holding office, is a subluxation of that joint.

It will be understood that if any holding element of a joint as described has suffered laceration so that the

joint surfaces are not held in normal apposition, such laceration is a subluxation.

If a holding element of a joint has suffered contusion, that holding element no longer sustains the joint surfaces in normal apposition, and the joint is subluxated.

When one or more of the holding elements of a joint, whether the same be cartilage, ligament, membrane, tendon, aponeurosis, muscle or otherwise, have undergone disintegration as a result of failure of physiologic reproduction of tissue, or as a result of pathology from primary occlusion or chemical adversity, the result is that element is weakened, lessened in size, and therefore fails to sustain normal joint relationship, and the result is subluxation of the joint affected.

The familiar pathologic process by which giant-cell productions are formed, results in a tissue occupying more space than normal, and when such pathology by enlargement occurs in one or a combination of the holding elements of a joint, the joint surfaces are perforce held out of normal apposition with each other, and the joint is subluxated.

By a careful consideration of the last five paragraphs the student will see that the symptoms of subluxation are comprehended in the five characteristic tissue injuries by which subluxations can be produced.

In order to establish the existence of disease recognized under the term subluxation, the student must first turn his attention to the symptoms of sprain, and as has already been stated the paramount evidence of sprain is congestion, pain or soreness with constriction, inflammation and perhaps fixation.

It must of course be explained that sprains that also

partake of the nature of tears may heal with fibers torn apart or torn loose, and thus remain with the effect of sprain upon the joint surfaces after the acute and painful condition which would indicate sprain has passed. In such a situation the sprain falls more nearly into the scope of disintegration, and yet not wholly so.

Laceration, as it applies to the holding elements of joints, is usually not difficult to isolate and understand, because its incipient marks are usually superficial. Hidden lacerations are not impossible, and the observer should always be on the lookout for such situations. However, subluxation by laceration is usually very simple and easy to detect.

Subluxation as a result of contusion is very much more difficult, because contusions may occur as a result of concussion of phases of force in a confined angle without there being any outward marks of violence whatever.

It is true that contusions thus caused are produced identically with sprains, and yet there is a marked difference in the effects thus produced. A sprain caused by sudden application of force beyond the resistance of the joint, partakes of the nature of strains and tears occurring by the extension of the holding elements, whether ligaments, membranes, or what not.

On the other hand, contusion in such joint distortion is always the result of compression between the bones involved, the contusion upon the holding elements being produced by the colliding violence of the bones involved.

It will be seen that subluxation by contusion of the holding elements of a joint is a still graver and more damaging injury to the joint than is that of subluxation by sprain.

But here again the symptoms of subluxation by contusion are paramountly those of pain, swelling, and soreness, and many of the fibers of the contused elements will be severed and will heal apart, and the soreness, swelling and heat will disappear leaving only the symptom of disrelation of the joint elements to declare the character of subluxation. Here again the result will partake somewhat of the nature of occlusion by disintegration.

Disintegration producing subluxation may only be detected by the fact of the reduction in size of the holding elements of the joint.

By the word disintegration as used in this connection is meant a progressive failure of reproduction of cells in a holding structure, so that in a permanent nature, (although not wholly so) the structure is less in size and less in strength, and therefore, fails to hold the joint elements in their normal relationship.

Disintegration is many times referred to as atrophy and it is indicated under several terms. It is immaterial what terms are applied, it is the sole effect of disintegration in the holding elements of the joints that is paramount.

It is generally not difficult to determine by palpation whether joint holding elements have undergone considerable disintegration, and this applies solely to the disintegratory effects pointed out in sprain, laceration and contusion of holding elements of joints.

It must be confessed that there may be deep and hidden elements of joints that can not be palpated that have undergone disintegration, in which event the diagnostician must rely for his proofs of disintegration

upon general symptoms that will be observed in the organism, and upon approximation of distances, or the geometry of compensation as detailed in this work.

Disintegration of the holding elements of a joint quite largely involve the vertebral and interosseous cartilages. Indeed, this is the usual structure that primarily undergoes disintegration, although it is true that the ligaments and capsules as well as longitudinal tendons and muscles may undergo disintegration and thus produce subluxation.

Enlargement producing subluxation will always be of such a prominent character, that any detailed discussion of it as a symptom need not be indulged.

However, it is necessary to state that many times joints are subluxated because of small and hidden enlargements, and the subject must not be passed over too casually.

One thing that always proves enlargement is the fact that when a joint is subluxated because of enlargement in any of its holding elements, it is always impossible even for an instant to place the joint surfaces in relationship.

Subluxation by enlargement most frequently applies to intervertebral cartilages or to membranes or cartilages within joints. However, enlargement sometimes, indeed quite frequently, occurs in the capsular tissues of joints.

From all that has been said, the student will see that subluxation may only be distinguished, from simple disrelation with absolute certainty, by the fact that subluxation has a greater degree of permanency than simple disrelation.

In a fresh subluxation that has been produced by

injury, and in a simple disrelation which is the result of strain, sprain, or the injection of poisons that have produced violent constrictions and fixations of joint elements, it is impossible by direct examination of the joint to detect subluxation.

However, an attempt to relate the joint under examination will always disclose whether the injury is subluxation or simple disrelation. If it is only simple disrelation the joint will quickly assume its normal attitude, and retain that attitude. If the injury is of the gravity of subluxation it will be difficult to cause the articulation to assume its joint attitude, and if it does it will not retain that attitude, because the holding elements are injured to the extent that they can not retain the joint surfaces in apposition.

In chronic conditions the symptoms of subluxation are marked, and are not difficult to distinguish, for there the effect of gravitation incident to the law of compensation will cause the subluxations to stand out in a very marked manner.

It is not difficult in studying the effects of gravitation upon the body, and in studying the distortions of joints to conform to those effects, to observe and classify the character of basic subluxations that have been produced, which subluxations compel the distortion of the rest of the body, and it is not difficult to observe the subluxations that have resulted by reason of the response of the superimposed and appendal body to the basic distortions.

The student is urged to make a very careful study of the whole subject of subluxation, and he is here carefully informed that his accuracy in reading the

symptoms of subluxation, will depend almost wholly upon his general knowledge of the functional offices of the body, and his very high and well-developed ability to make approximations of size, shape, color and relation in the detection of normal attitudes.

CHAPER VIII

LUXATIONS AND FRACTURES

Luxation is a phase of disease wholly confined to joints and joint tissues.

In a circumscribed sense a luxation is very closely analogous to a fracture. That is to say, in the sense that a luxation is a complete dislocation.

A luxation exists where, because of sprain, laceration, contusion, disintegration or enlargement of the holding elements of a joint the articular surfaces have wholly lost their contact.

In other words, a luxation is such a complete distortion of a joint as to amount to complete dislocation, and in simple words means that the articulation is out of joint.

The student will observe that a luxation occupies a position between subluxation on the one hand, and fracture upon the other. It is a distortion of the same permanent nature as a subluxation, but is a graver injury.

The student will recall that in a subluxation, while there is injury of a permanent nature in the holding elements of a joint, still the apposition surfaces are not wholly separated, and will, therefore, see that the distinguishing feature between subluxation and luxation is that in subluxation some part of the joint surfaces are still in contact, while in luxation no part of the joint surfaces are in contact.

Luxations occur in two ways: (1) as the result of trauma, which of course is incipiently acute in all of its aspects, and is peculiarly within that department usually referred to as dislocation; (2) by chronic, pathologic processes incident to such disintegrational phases as atrophy of the holding elements of the joint, or a catarrhal condition in which there is extension of the holding elements of the joint.

As to traumatic injury resulting in acute luxation, all of the phases of shock and occlusion, with phases of reaction that will be discussed in connection with fractures, occur, and need not be further discussed in this connection.

As to luxation by pathology some little illustration is necessary in this connection, and the student is referred to conditions in which, by elongation of the holding elements, the head of the femur is out of the ascetabulum. Of course, in this illustration, the structure approximately responsible for the dislocation is the elongation of the ligamentum teres.

Another illustration of luxation by elongation is frequently observed in the shoulder joint, where the ligaments have extended so much that the head of the humerus hangs down from the glenoid cavity frequently as much as an inch or more.

The illustrations given will be sufficient to direct the student's mind to all characters of pathologic luxations, and the subject need not be further discussed in this connection.

This subject should not be passed without some reference to the reduction of luxations. The reduction of many of them will fall within the rules laid down in

the department,—"Relatology"—in the first volume of this work, and as to phases not therein covered it must be suggested that under the present practice the reduction of such luxations is not held to be within the practice of Chiropractors, and therefore, no extended discussion will be indulged.

The means of reduction of pathologic luxations will suggest themselves to the student who has been instructed in Relatology, and need not be discussed in this connection.

Acute traumatic luxations are to be reduced substantially in the manner that fractures are, and wherein they differ from the reduction of fractures the discussion is of such a technical nature that it can not be stated understandingly without being accompanied by a clinic illustration, and since the subject does not fall within the purview of Chiropractic practice, no discussion of that part of the work will be attempted, and as to the general situation the student is referred to the department of "Relatology" in Volume One.

FRACTURES

Fracture is a traumatic injury wholly confined to bones, and exists when a bone has been broken, cracked, slivered or bent.

The reduction of fractures should be wholly within the practice of Chiropractic, but under present custom it is clearly within the scope of surgery, and therefore, it is not the purpose here to discuss fractures in detail. It is the intention only to discuss Chiropractic principles that apply to fractures.

Fractures are classified as being *complete* or *incomplete*, and to be either *simple* or *compound*.

A *complete fracture* is a condition in which the bone is broken in two or more parts. That is, where the actual osseous substance has been separated by the application of force in excess of the resistance of the bone tissue.

An *incomplete fracture* exists where a bone has been partly severed, and remains partly united. Under this heading are such conditions as bones that have been split, slivered, or even bent, so that some parts of the osseous tissue have been severed.

In connection with fractures in which bones have been bent so as to come within the purview of incomplete fracture, a little further discussion is necessary for the purposes of the Chiropractor, because in his practice he meets with so many conditions of this kind, which need nicety of skill to restore their proper relation.

Incomplete fractures of the character under discussion are called greenstick, because the bones thus affected have been bent, but it must not be overlooked that incident to the bends, there is actual separation of the molecules of the osseous structure to some extent.

Greenstick fracture is a somewhat prominent phase in the application of the principles of Chiropractic. Reference to a few of these will be found helpful in this connection.

One of the places where greenstick fracture comes prominently to the notice of Chiropractors is in connection with the sacrum.

Greenstick fracture of the sacrum occurs frequently in children, incident to the fact that in childhood the so-called intervertebral segments of the sacrum which are only a means to ossification are largely cartilaginous, and are easily susceptible to greenstick injury.

Greenstick fracture of the sacrum is very prominent in that phase of abnormality ordinarily referred to as *infantile paralysis*, and will be fully discussed under that topic. Reference is only made to it here to impress the importance of the subject upon the student's mind that he may be ready for it when he comes to that phase of the discussion.

Frequently greenstick fracture of the tibia and fibula occur, and these injuries are easily capable of correction in childhood, by proper application of the skill of the Chiropractor.

There are many bones subject to this character of distortion in the organism, the correction of which must be left to the resource of the Relator incident to the skill that he has obtained from the departments of Relatology and Relating, and his general experience and observation in clinic.

A *simple fracture* is one in which the bones are broken, but do not protrude through the relative flesh.

A compound fracture is one in which the bones are not only broken, but protrude through the flesh.

There is really no sensible distinction in the two characters of fracture just given, for from the Chiropractic standpoint it will be plainly seen that in a simple fracture the relative flesh will be injured many times as much, or even more than it would be if the end of the fractured bone protruded through the flesh, and it will be seen that the injury is always compound. That is to say, there is injury to the bone, and at the same time to the relative flesh.

A fracture is always an irritant. It is primarily an irritation to the nerve endings in the area of the injury,

and to the nerve trunks extending through the area of injury.

Injury to nerves in fracture is usually by impingement, traction or stretching, and distension caused by the violent distortion of the osseous structures involved together with all of the relative tissue. In addition to these, it must be remembered that many times there is direct injury to ganglia.

The irritation incident to fracture produces that effect upon the nerve system usually referred to as shock, the gravity of which indicates the amount of direct injury to that system.

Shock, incident to fracture, is a temporary and partial suspension of functional process, and in that sense is the suppressed or reduced function resulting from the injury. In this phase, temperature and vitality are reduced.

Sometimes incident to fracture the patient dies as a result of the depression of vital offices incident to the shock. If, however, the patient does not die from shock, he soon enters upon the process called reaction.

If the patient, who has suffered fracture, passes the process of shock and enters upon that of reaction, the irritation produces motor reaction to the whole area of the irritated nerves, thus producing constriction of the tissues of the vertebral column over a much wider area which results in the osseous segments being closely approximated—a condition called constriction, which is simple vertebral disrelation. The constriction and vertebral disrelation, functions to the production of a wider range of occlusion, particularly in those nerves extending to the area of the trunks from which nerves ramify the fracture, and incidentally to a much wider area.

It seems hardly necessary to say that the shock symptoms will not wholly disappear until the fracture has been reduced, or until sufficient time has elapsed that an incipient healing in the fractured attitude has taken place, which sometimes occurs.

In view of the statement made in the last paragraph, it will be seen that it is of the utmost importance that the reduction of a fracture should take place as soon after it has occurred as possible, and that, with other things equal, the more quickly and perfectly the fracture is reduced, the more quickly all phases of shock will be removed, and the more quickly the process of restoration from the injury will take place.

Nothing will be said as to the method of reducing fractures in this connection. That subject will be left to works that are now extant, and that are addressed to that subject.

So soon as a fracture has been properly reduced, which means so soon as the fractured osseous structure has been related so that the ends or parts severed are placed in proper relation again, the process of first intention, as it is called, should commence.

First intention is the name surgeons have given to the process of healing together the several parts of fractured bones. This function is accomplished by the production in that area of what is called neoplasm—a colloid projected between the extremities of the fractured parts in which osteoblasts are produced, which ultimate in the union of those extremities.

If motor reaction from the injury be not so grave as to produce profound occlusion of stimulus to the area, neoplasm will begin to be produced at once, but if

occlusion to the area is profound, and is not in some manner removed, no neoplasm will be produced, and the fractured extremities of the bone will not undergo first intention. This result quite frequently occurs, and in such cases the surgeons say first intention does not take place and then, of course, the only thing that can be done is to amputate the part, if it is in a place where amputation is possible. Otherwise the patient dies.

Fortunately, careful and proper reduction of the fracture usually serves to sufficiently remove occlusion and irritation in the area to reduce constriction of the vertebral centers, so that vertebral disrelation is overcome sufficiently, that first intention takes place, even though it may take place rather slowly.

In such a situation relaxation of the longitudinal muscles of the vertebral column, together with other constricted tissues, result in almost complete removal of vertebral disrelation, thus reducing occlusion and neoplasm is rapidly produced, and intention of the ends of the fractured bone occurs readily and rapidly.

In such a situation if there is subluxation of the joints of the vertebral column at the area of motor reaction from the fracture, muscular relaxation will not release occlusion of nerve stimulus, neither will the careful and exact reduction of the fracture. But after both of these have been properly accomplished, occlusion of nerve stimulus to the area of the fracture will remain, and intention will be performed indifferently if at all, usually in such conditions intention does not take place.

Where an area of the vertebral column corresponding to that of the fracture is gravely subluxated, so that there is marked and extensive occlusion to the area of

the fracture, the tissues will be weak, flaccid, and of a negative character, and incidentally the bone at that area will not have its normal resistance. In such cases intention does not take place, and amputation after a long and painful period becomes a surgical necessity.

It will be seen, therefore, that in case of fracture the very first thing indicated is relating to break up the effect of shock, and to release occlusion to the area before the reduction of the fracture is performed.

So soon as the fracture has been reduced, relating should be performed to assure that constrictions are relaxed, fixations broken up, and the osseous elements and other tissues in subluxated joints properly related to release occlusion.

If these things have all been accomplished first intention takes place within a very short time, and complete union of the bone is soon accomplished.

CHAPTER IX

ABNORMALITY OF BRAIN—AFFIRMATIVE

Fevers—Brain Fever—Delirium Tremens Apoplexy—Hydrophobia

The therapeutic conception of so-called brain diseases is of such a general and unspecific nature as to be substantially valueless to the Chiropractor.

However, therapeutists have been very painstaking in noting symptoms in connection with the various phases of abnormal brain function, and this data can be made to perform a valuable office when scrutinized from the principles of Chiropractic.

Before taking up a discussion of the phases of brain abnormality a few propositions must be stated that are introductory thereto, and the student should bear these propositions in mind, and use them as aids to an understanding of any adverse process that may occur as incident to the brain.

In the department of Pathology in this work, it has been stated that any phase of abnormality of the tissues of the brain, incidentally results in phases of abnormality of tissue and function in parts of the body corresponding to those parts of the brain, and that such abnormality in the body, considered aside from any other influences will always be in direct ratio with the tissue abnormality of the brain.

To make the proposition stated a little clearer, supposing the whole organism to be well, and then a

traumatic injury occurring to a limited area of the brain. In such a case the parts of the body ramified by nerves which have origin in the injured cortical area will be affected equally with that area, and the parts of the body ramified by those nerves will be affected as gravely in tissue, and therefore, function as that area of the cortex of the brain.

In the illustration last given, it will be seen that if the cortical area is very small, and the nerves which have origin in that area ramify widely different parts of the body, it will be very difficult, if not impossible for a diagnostician to observe the phases of abnormality in the tissue thus affected, and to distinguish the adverse function incident thereto. However, he must understand that such tissue and functional abnormality exist in such cases.

The contra-proposition necessary to state is that abnormality of the tissue of the body produces abnormality of the corresponding parts of the brain. If, therefore, the nerves of an area of the body are severely injured, whether by trauma or chemical adversity, the corresponding area of the brain, that is, the area of the cortex from which those nerves have origin, will be as abnormal in function as are the nerves involved.

By way of illustration of the proposition stated in the last paragraph, it is well known that severing nerves produces shock to the brain, which only means that the cortical areas corresponding to the body area where the nerves are cut, is functioning abnormally in ratio with the injury, and will continue to function abnormally until the cut nerves have reunited, or until the brain

ends of them have healed by establishing new terminals.

The rehabilitation of the shocked cortical areas is accomplished through that wonderful medium of inter-area brain ramification, and the nerves are restored by the inter-area ramification in body tissue.

In connection with the last statement it must be remembered that after shock, a brain cell begins recovery *per se* before the nerve or nerves extending from it does and is restored first, although the restoration in one instance follows almost instantaneously upon the other.

In this connection, it must be remembered that disrelation in body tissue producing occlusion, frequently results in brain abnormality in the way illustrated, and to the extent illustrated.

In this connection the student should observe that there are two ways by distortion of body tissue in which the brain is rendered abnormal. The first of these is by shock-like effects through the nerves injured, changing the vibration of those nerves, thus in a sense negatively affecting the brain.

The second way is by occlusion of returning nerves to the brain, such for instance as those which have extended down through the cord, out through a foramen, then through the visceral primary division into the gangliated cord, extending headward several ganglia, then returning to the neural canal through a gray ramus communicans, and then back up through the cord to the cortex.

It will be observed that if there is distortion in either of these foramina there will be occlusion of stimulus in the returning nerves to the brain, and in such a case the

brain area, which should be supplied through returning nerves will be in ratio deprived of its stimulus, thus producing an affirmatively adverse effect.

The proposition of occlusion of returning nerves would seem to disturb the ratio as stated. However, it must be remembered that the negative effect upon cortical brain areas will be lessened somewhat by distortion, for occlusion interferes, and serves to lessen the change of vibration to the brain, which fact will be compensated for by affirmative occlusion through returning nerves.

In connection with the proposition last stated, it must not be overlooked that occlusion is always the result of injury by trauma or chemical adversity, and therefore, brain tissue and function as an entirety will always be abnormal in ratio with distortion as an entirety. In other words, distortion as an entirety will be just equalled by abnormal brain tissue and function.

In the examination of a patient, therefore, the diagnostician should always approximate the distortion of the whole organism, and reach the conclusion that brain tissue and functional abnormality are equal thereto.

Any tissue abnormality that can occur in any part of the body, can occur in the tissues of the brain, for it must be constantly kept in mind that the brain is nothing but a cellular organ constructed similarly to large glands of the body, and acts within the law applicable to any tissue.

Brain tissue abnormality has been fully discussed in the department of Pathology in this work. It will here, then, be only necessary to call the student's

attention to the propositions of elevated temperature, and depressed or minus temperature as representing the affirmative and negative processes, and the changes of tissue that take place incident to these processes, which are described in the chapter entitled "Normal and Abnormal Tissue," in the Department of Pathology of this work.

FEVERS

The phenomenon that has been called "heat plus" in the Department of Pathology herein, which is an elevated or exalted temperature, has been for many centuries called fever. Any abnormal rise of temperature in the organism, then, is called a fever, and all that phase of function comes under the classification of fevers.

There has been an attempt on the part of therapeutists to designate these rises of temperature as separate and distinct things, and to refer to them as different fevers. This is quite a useless attempt, since the process by which the phenomenon is produced is always the same, only differing slightly as to its phases.

Fever, however, is of two characters—simple fever and eruptive fever. The only distinction between these two is that in one the marked phenomenon is that of abnormal heat, while in the other, accompanying the abnormal heat, there is an eruption upon the surface of the body.

The first symptom of fever is that of chill, that is tosay, a sensation of cold not infrequently accompanied by shivering. It must be understood that while the sensation is that of cold, there is nevertheless in such

process the beginning of a fever, the chill itself being the incipient shock to the nerves and brain incident to traumatic injury, or some marked chemical injury, such as cumulative toxin within the body, which has just reached the virility to overcome the resistance of the organism in whole, or in part.

It sometimes happens that the first symptom of fever, called chill, is the only symptom that occurs, because the organism is so overcome by the shock from trauma or poison that its resistance is entirely overcome, in which event of course dissolution takes place before any other symptoms are manifested. If, however, the organism reacts from the effects of trauma or poison, then elevated temperature as a result of the increased friction soon becomes manifest.

Chill is a symptom that accompanies fever to its highest point. So soon as the highest point in the elevated temperature is reached, the sensation of chill ceases, and will not be observed at any phase during the decline of temperature, but if in the decline for any reason the temperature should begin to rise again the sense of chill will recur, and again accompany the temperature to its height.

Therapeutists have named certain symptomatic processes that take place with regard to the brain, and these will be taken up in their order and discussed in such manner as to illustrate the application of Chiropractic principles thereto.

BRAIN FEVER

In connection with the analysis in the preceding portion of this chapter, in the way that elevated temper-

atures are there referred to, it may be well understood that brain fever is incident to every phase of functional abnormality in which there is an elevated temperature.

In some phases of abnormality, however, elevated temperature in the brain is so marked and characteristic as to largely obscure the symptoms elsewhere in the organism, while in other phases the elevated temperature of the body largely overshadows the symptoms of fever in the brain.

In this connection the student will observe that the phase being here discussed is that in which the elevated temperature of the brain is most profound. But while remembering that fact, he must also understand that the same character of phase, less marked, will be indicated in the entire organism.

In order to make the statement in the last paragraph perfectly clear, it must at all times be remembered that no such thing as brain fever occurring distinctively, that is, as separate from the rest of the organism, is possible.

Brain fever is substantially always the reaction from shock. The shock may have occurred suddenly as the result of extreme and sudden grief, fear, etc., or it may occur as the result of long sustained tension, anxiety, worry, etc., sufficiently intense to finally overcome resistance of brain tissue.

In any event brain fever is usually ushered in by pronounced and abrupt chill, accompanied by intense pain in the head, very soon presenting an extremely flushed face and head, with congestion of lymph in the eyeballs and tissues of the orbit, roaring or cracking in the ears, and not infrequently with nausea and vomiting,

all of which symptoms are accompanied by an excited and distressed countenance, with hypersensitiveness of the organs of sense, especially the eyes and ears. Frequently there is delirium and convulsions. These occur more frequently in children, because children have not accomplished much self-control.

In a short time usually a very high temperature is reached, which continues and is accompanied by symptoms of frenzy, the patient becoming so violent that he must be restrained to prevent injuring himself.

Following the state of frenzy, as the negative phase of brain tissue is approached, there sometimes occurs "the state of oppression," as it is therapeutically called. The state of oppression may last for hours or for days. It is in the state of frenzy, or the state of oppression that the patient frequently expires.

If relaxation should occur during the period of frenzy the patient escapes the period of oppression and begins convalescence. If he should react from the period of oppression he begins a slow process of recovery.

The description so far given of brain fever, is based upon the patient receiving no direct assistance through the means of lessening occlusion by relating to free the nerves involved, and upon the idea of the patient being cared for therapeutically.

In brain fever, or in any fevered condition, the patient should be placed upon a bed, the head of which should be elevated from six inches to a foot, in order that his head may be higher than his feet without the use of a pillow. In other words the body of the patient should lie flat upon the bed, and yet the head and shoulders should be higher than the feet.

The object to be attained by the elevation of the head of the bed is to assist the reduction of congestion in the patient's head by the process of gravitation.

The patient should be kept in such position or attitude as to permit of as little obstruction to the transportation of liquids as possible. That is, the neck should not be allowed to be craned or twisted, and the head should not be permitted to be thrown back, or held in any manner that would interfere with free stimulation through the nerves.

In all fevered conditions patients will indicate a desire to throw the head back thus sharply increasing the ventral curve of the cervical region, thereby occluding cervical nerves. The reason for this disposition is that the dorsal longitudinal muscles of the vertebral column in the cervical and headward thoracic regions, in their hypertonicis overcome their weaker opponents. Care should be taken by the attendants that the head is kept from being thrown backward.

The room in which the patient is should be shaded to a soft light, and a free passage of air from the outside should be maintained, but a draught of air should never be permitted to strike directly on the patient. It should be arranged always so that the air passes by the patient, or sufficiently high above him that it does not strike upon him.

The temperature of the room should be maintained at about seventy-five degrees Fahrenheit.

In case of brain fever, so-called, or in any case of fever, but particularly in brain fever, the patient should have no food of any kind or character, but should have as much good, cool water to drink as he desires,

if he expresses desire for water, and if he does not he should have administered to him at least a pint, each two hours.

It is sometimes thought, on the part of those in charge of a brain fever patient, that he should have some kind of food to keep up his strength. This is a very great misconception of the fact. What he needs above all things is that his entire alimentary process may be at rest, save only the depuratory phase, and there should be no food administered for it would only interfere with the depuratory process. Water in this situation, for the time, meets all of the food requirements of the body.

The patient should be entirely undressed, that is to say, nude, and should have nothing over him but a sheet or very light blanket. This precaution is to permit free elimination from the skin, and also admits of easy friction of the skin by the nurse, which should be performed in small areas from time to time, especially around the back of the neck down to the tops of the shoulders, and over the throat and chest, throughout the temporal regions, and across the eyes and forehead. And at least twice each day a thorough and careful massage of the whole scalp should be performed.

Under the application of the principles of Chiropractic in brain fever, the hair need not be removed, but should be kept free from the head so as not to draw or bind, and may be frequently moistened with cool (not cold) water.

Ice or extremely cold water should never be applied to the head in any fevered or inflamed condition. The application of ice to the head is a therapeutic

measure of extreme danger, and frequently results in such shock as to result in death.

Relating in a case of brain fever should commence by releasing occlusion of the brain and heart nerves; followed by removing occlusion of nerves ramifying the depuratory organs, the kidneys and liver being always prominently involved, and by removing occlusion of nerves to the alimentary tract to secure its depuratory function.

At first the Chiropractor should proceed with caution, and should particularly address himself to the brain symptoms, and releasing should be frequent; perhaps the first, second and third relatings should occur at fifteen or twenty minute intervals. So soon as relaxation of the tissues in the neck is well under way he should proceed with the other areas as outlined.

It will be found in such cases that motor reaction is intense, and that frequent relatings will be necessary to break up the tendency to re-constriction and fixation, and at first constriction and fixation will be found to be intense.

The frequency of release must always be regulated by the tendency to re-constrict and fix, and the period between addresses should always be lengthened as the symptoms of relaxation become more manifest. In a case of brain fever, relaxation should be accomplished in from two to twenty-four hours, after which relating should only be performed sufficiently often to keep down constriction. After three or four days a thorough relating daily, should be sufficient to secure recovery.

Correction as herein indicated will be applicable to all phases of elevated temperature in the brain.

DELIRIUM TREMENS

Delirium tremens is a peculiar phase of insanity of the brain fever type following regular and grave alcoholic poisoning.

In such a situation the stomach and intestine have been continually poisoned until the shock-like injury to the nerves becomes intense. Sometimes tumors exist in the stomach and duodenum in such situations, in which cases the brain phases are very pronounced indeed.

Abnormal mental conditions analogous to delirium tremens are incident to regular poisoning by any of the so-called habit-forming drugs.

Delirium tremens occurs when such a large amount of alcohol has been absorbed and taken into the liquid transportation system, and thence to the brain as to cause muscular constriction, accompanied by congesting of the tissues of the brain which have been greatly depleted, and to such an extent as to be at least temporarily overcome.

In any such condition it will be understood that in connection with the irritated condition of the brain, the walls of the stomach and intestine will also be at least greatly inflamed. The kidneys will be congested as will also the general digestive and eliminating glands of the body.

It frequently happens that notwithstanding the grave abnormality of the whole glandular body and brain, the individual is able to exercise great muscular strength. Usually, however, the person is very weak and prostrated, and is in a strange, hypersensitive condition.

One of the pronounced and peculiar symptoms incident to delirium tremens is the optical illusions, the patient frequently imagining he sees snakes, rats, worms, vermin, and all kinds of horrible sights, and that he is being pursued, and his life threatened, etc. In such a condition the patient will not as a rule desire water. However, he should be induced to drink a great deal of water, even though it produces vomiting, but should have no food of any kind, until the digestive apparatus indicates activity, and then for several days he should have nothing but meat broths.

Relating to remove delirium tremens will be first directed to freeing the stasis in the brain, and securing depuration from the head. For this purpose attention will be given to the cervical and headward thoracic areas. Following this, relating should be performed to secure depuration from all the glands, but particularly the digestive glands. That is to say, the liver, spleen, and pancreas.

Relating should begin, then, by releasing all of the headward thoracic keys if there are any, followed by longitudinal traction in the cervical region, and release of the eight cervical and third thoracic areas, followed by those at the fourth, seventh, eleventh, and twelfth thoracic areas.

APOPLEXY

Apoplexy means shock. The process results from a general abnormal tissue condition, some aspects of which approach the negative phase. The particular symptoms constituting apoplexy, however, are of the affirmative phase. Apoplexy is a sudden, spasmodic

result of a cumulative congestion in brain tissue, resulting from a long-standing, widespread and grave occlusion of nerves to the brain.

The tissues of the brain, in preparation for this process, have become so depleted as to permit great congestion in the vessels of liquid transportation. The blood vessels and capillaries are flaccid, and permit great distension. The tissue situation is not wholly dissimilar to incipient hydrocephalus.

The general phases of the process, however, are very different, because of occlusion of the kidney nerves especially, and many times of the nerves to other glands of the body.

Because of occlusion of kidney and liver nerves there is usually an excess of acids produced which fail to be eliminated, through the kidneys. On account of the accumulation of acids, nerve terminals are irritated, and motor reaction becomes active, and is usually most profound in the cervical muscles, and the longitudinal muscles of the vertebral column.

There are other contributing causes of constriction of the cervical muscles, which are of exceeding importance to know at this juncture.

Any continuing irritation at any place in the body will have the effect, by motor reaction, of producing constriction of the cervical muscles, and this is peculiarly true in connection with anomalous formation of the lower orifices of the body.

The author has never observed a case of apoplexy in a patient who did not present anomalous, or pathologic conditions in the feetward orifices of the body. The reference is to those persons, both male and female,

needing circumcision, and to incidental rectal, vaginal and uterine pathology.

The anomalous orifices just referred to have the effect, by motor reaction of producing a state of great hypertonicis of the muscles of the cervical region, with very marked and rigid fixation, and no matter how this condition of the cervical musculature is produced, the situation produces occlusion of nerves controlling drainage from the brain, and also of the veins and lymph vessels so involved.

The arteries carrying blood to the brain are thick-walled, and are not so responsive to abnormal pressure, and therefore, blood will be forced to the brain more rapidly than drainage from the brain by lymph vessels and veins can be accomplished, resulting in a congestion in brain tissue, which constantly tends to increase. The situation then under excitement, or unusual activity, results in such a pronounced congestion as to overcome the resistance of brain tissue, resulting in the shock called apoplexy.

When an apoplectic spasm occurs the symptoms are in many respects similar to those in epilepsy. The face, from being florid from congestion, becomes very red, sometimes almost blue. The veins over the head and neck stand out visibly. If the person is standing he loses consciousness, and falls almost invariably backward or sidewise, where he lies, undergoing muscular spasm as though in a fit.

The breathing during the incipiency, and sometimes throughout the attack, is stertorous, and the blood congestion is very apparent.

If the attack is not too severe, presently the patient

ceases struggling and lies still, continuing the same character of breathing. The muscles undergo relaxation from exhaustion, particularly the cervical muscles and congestion in the brain will slowly disappear, after which the patient will resume consciousness.

In many cases, however, the constriction and deep fixation of the cervical region is so great that a pronounced congestion in the brain tissue remains, with such intra-brain pressure as to greatly delay, if not permanently prevent, return of consciousness. In such cases the patient sometimes dies without recovering consciousness.

Sometimes in the graver cases the congestion is so intense that hemorrhage occurs in the capillaries of the brain, in which event, of course the patient soon dies without coming out of the first shock.

Usually patients suffering from the first shock of apoplexy only remain unconscious for a short time, and as soon as muscular relaxation occurs, recover consciousness rapidly, and in a short time will be able to go about.

Persons of an apoplectic tissue situation have a continuous congestion of various amounts in the tissues of the brain, of which they are conscious by one marked symptom which is that of dizziness. Sometimes without what would actually be called dizziness, there is a sensation of falling great distances, and the person would fall in this hallucination if not supported. In other cases the symptoms are those of roaring in the ears, specks or motes before the eyes, etc., but sometimes there is only a sense of dullness or sluggishness of the brain, and in practically all cases there is a continuing

low fever in the brain tissue, and the tissues of the head generally.

Relating to remove the process called apoplexy: the patient should be kept very quiet for a few weeks, not entirely fasting, but substantially so, taking nothing but thin broths, and should not permit himself to engage in excitement or exertion. This must include total abstinence from intoxicating liquors, tobacco, and other narcotics, and all sex indulgence.

The immediate care of one suffering an attack of apoplexy should be to place the patient upon the venter upon a flat bed or other structure, in such manner that the head and shoulders are at least twelve inches higher than the feet. The head should lie obliquely upon the face. The neck should be kept straight and be permitted to incline toward the venter. That is to say, the chin should be in, and the crown well out, so as to loosen the muscles of the dorsal aspect of the cervical region, and permit free opportunity of drainage from the brain, and also freedom of respiration.

It should always be remembered that first aid to any person that has fallen from congestion in the brain, is to place the patient upon the venter with the head and shoulders higher than the body and the feet, and never under any circumstances to place such a person in a horizontal position upon the back. In apoplexy there is occlusion of all the cervical nerves, incident to the violent longitudinal constriction of the cervical muscles, by which pronounced approximation of the cervical vertebrae is produced. Incident to the cervical distortion there is also disrelation of the fourth, third, seventh and twelfth thoracic areas.

Relating should be performed at intervals of an hour until the pronounced constrictions begin to disappear, and breathing becomes easy, after which twice, or perhaps once a day will be sufficient.

HYDROPHOBIA

Hydrophobia is a phase of abnormality which is particularly evidenced by brain symptoms, and it is for that reason that it is presented in this chapter, the phase of abnormality being constitutional.

The primary irritation is presumed to be the result of inoculation of the saliva from a dog or other animal suffering from hydrophobia.

It is possible that a poison of the supposed character can be carried into the stased areas of the body in sufficient quantities to produce the irritation and remarkable columnar constriction with sufficiently widespread occlusion to cause the extravagant symptoms which are seen in what is called rabies. That rabies occurs, as contended, however, is not as definite and certain as might be desired.

It is known that many persons, having been bitten by dogs, develop these very pronounced symptoms. It is also well known that many persons simply standing by and observing an epileptic fit succumb to such seizures themselves, although they are not epileptic.

Poisons of almost any character inoculated in the body will produce many of the adverse symptoms that are described as being incident to hydrophobia. This will always be true if the poison inoculated is a very potent one, and in many cases of so-called hydrophobia the poison inoculated is not only potent, but the adverse

chemical condition of the patient is just right to produce the paroxysm.

The author has had cases of so-called rabies under his care from the inception. In every case the patient has been chronically abnormal glandularly, and the symptoms indicated that if this had not been true, there would have been no adverse symptoms from the inoculation.

It must be stated that the great unqualified fear of rabies produces many of the adverse symptoms, and frequently the adverse suggestion, co-operating with the poisons inoculated is sufficient to produce the convulsions of so-called hydrophobia, where the dog in question has been proven to have been well.

The pronounced symptoms incident to rabies is a violent constriction of the longitudinal muscles of the vertebral column with constriction and twitching of the muscles of the appendal parts of the body. The eyes appear glassy from congestion, with sometimes a peculiar redness. The saliva becomes frothy. The alimentary canal is inactive. The throat is dry and parched, and the continual movements of the tongue to relieve that sense sometimes causes the patient to appear to froth at the mouth. Paroxysms follow each other, in which the mouth will be convulsively snapped together, and the violence of the muscular paroxysms are sufficient to cause a whine-like moan to escape from the patient, frequently not dissimilar to that of a dog.

Relating to remove hydrophobia consists in continuous and careful watching of the vertebral column and the body generally to keep down constriction and fixation. It is a good idea to keep the patient upon the

table for hours together. Watching carefully, and every time an indication of constriction appears anywhere, or anything like a convulsion, to immediately release the nerves to that area, and, of course, every means to secure elimination should be resorted to. When the tendency to fixation and constriction begins to decline rapidly, relatings may be more widely separated, and thereafter sufficiently often only to prevent return of constriction is the correct procedure.

The patient will indicate an aversion to water, but he must be induced to drink, and if he should fail to do so, the water should be conducted to his stomach by a tube. If there is impaction a high enema should be administered every thirty minutes until the bowel is thoroughly washed and cleansed.

CHAPTER X

ABNORMALITY OF BRAIN—NEGATIVE

Depressed Temperature—Vertigo—Dropsy—Hydrocephalus

Depressed temperature is one of the pronounced symptoms indicating the negative process. It would be well to say at the outset that depressed temperature is the paramount symptom.

The pathology of depressed temperature, or "heat minus," is quite fully discussed in Chapter XIII of Volume One of this work, and the student is here definitely referred to the principles there laid down.

For the purpose of preparing the student's mind to consider what is about to be stated in this connection, it is recalled that normal temperature is the aggregate expression from friction of molecules of the body under the uninterrupted and therefore, normal radiation and application of stimulus, or the force of life.

It will be recalled that minus, or depressed, temperature is the paramount symptom of shock, but it is not the symptoms of that phase of pathology that is here under discussion. The student's mind is here being directed to the character of injury that has been therapeutically conceived to be the result of disease.

It is not intended by the last statement to have the student reach the conclusion that shock is not disease, but simply to impress him that in this connection symptoms arising from the general process of abnormal-

ity is the phase under discussion, and not that incident to sudden injury.

A minus, or depressed temperature, then, considered from the standpoint under examination, is the heat expression arising from the functional process after it has passed through all the phases of the affirmative process until, by nerve occlusion and chemical adversity, friction has been reduced until the heat arising therefrom is less than the normal temperature of that person.

From what has been said in the last paragraph, the student will understand that minus, or depressed, temperature, as a phase in a functional process, is always an unfavorable symptom; for it is proof that depuration and elimination of toxins have not been accomplished as rapidly as they should, but that they have accumulated in the areas of stases, which exist because of occlusion of nerve stimulus.

Depressed temperature is also proof that occlusion is increasing and because thereof the organism in the area of depressed temperature, or generally, if the symptoms are general, is undergoing an accumulation and precipitation of toxins.

Minus or depressed temperature is a symptom which always advises the Chiropractor that he must find some way to sufficiently release stimulus that the area or organism can catch up on depuration and elimination, or that in a short time there must be a fatal result.

It is a remarkable thing in this connection, that the therapeutic world has for centuries called the symptoms of the opposite functional process to depressed temperature, fever, but has never offered any name for the

negative phases other than depressed, minus, or sub-temperature.

VERTIGO

The word vertigo simply means dizziness. Dizziness is a symptom that occurs as incident to many phases of abnormal process. It is a prominent symptom of practically all phases of the affirmative process, peculiarly those in which there is marked rise in temperature.

Dizziness is a pronounced symptom of marked traumatic or chemical injury. Of course, it is well understood that traumatic injury, which is of sufficient gravity to produce shock, is expressed, in one phase, by dizziness. It is also well known that the process introduced by the administration of narcotics or poisons always presents the symptoms of dizziness.

Dizziness is also a prominent symptom of markedly depressed or minus temperatures. While the symptoms that have just been referred to are important in connection with dizziness, still the subject here definitely under discussion is that phase of adverse process which occurs without either markedly affirmative, or negative, temperatures, but as incident to that phase of abnormality in which the paramount symptom has been therapeutically called vertigo.

Brain tissue is of a soft and spongy nature, and is constructed much like the large glands of the body. The brain is, therefore, easily subject to congestion.

Congestion of liquids in the brain may occur as incident to the general structure of the brain, but is more usually in the meningeal sacs and ventricles.

The peculiar phases of congestion in the brain are

frequently noted in the symptoms of what are ordinarily called colds; for in colds, so-called, there is many times sufficient congestion in the brain to superinduce dizziness as a symptom.

The suggestions just made have been stated for the purpose of calling the student's attention to the fact that in certain quasi-affirmative and negative phases of process, that is to say, where the temperature is not really affirmative nor negative, but fluctuates slightly into both phases, because of abnormality of the tissues of the brain area, that process prepares the way for the phase of abnormality called vertigo.

In this connection it should be suggested that the therapeutic world has advanced the theory that the organ of consciousness of equilibrium is in the inner ear. To explain the error of this theory it is only necessary to call attention to the fact that the inner ear is only one of the mechanisms connected by nerves to the brain cortex, through which nerves certain vibrations are transmitted which can be translated into the consciousness of so-called sound, or better into hearing.

There is no mechanism in the ear by which consciousness of the relativity of objects in the immediate environment may be known, which would be necessary, as a transmissive fact, to constitute an organ of equilibrium.

It is perfectly clear that equilibrium is a phase of consciousness not unlike the consciousness of beauty, harmony, truth, hate or love, and can be ascribed to no organ, but applies to those areas of the cortex which have to do with the production of that phase of consciousness which in the same sense we call equilibrium.

In this phase of thought it will be seen that vertigo is a symptom paramount in indicating that those areas of the brain cortex, in which the consciousness of equilibrium is produced, are the subject of congestion, chemical irritation and retention of morbidity, which have resulted in a tissue condition incapable of correctly performing the mental process which we call equilibrium.

Aside from trauma, in its ordinary occurrence, it is the experience of the human family that dizziness is a symptom concomitant with abnormality of the alimentary canal and digestive glands; peculiarly those of the liver and spleen in the direct analysis, and incidentally, but not less pronouncedly, the kidneys.

It is well known that the symptom of dizziness can be quickly produced by narcotics, or poisons administered through the alimentary canal. We do not know whether this result is produced as incident to the conduct of the liver and spleen, but there is nothing to definitely establish that effect, and the phenomenon is accounted for as a result of marked motor reaction and constriction, occluding returning nerves to the brain, and changing the vibrations in nerves extending from the brain, thus producing the symptom of dizziness as a phase of waning consciousness.

We know that such influences do affect the spleen and liver, however, for we have found by the continual ingestion of alcohol, for instance, that in the ratio that these organs are affected adversely, the symptom of chronic vertigo appears.

The kidneys are ramified by nerves from the same trunks that the small intestine, the flexures of the colon, the ascending and descending colon are, and, therefore,

they are continually affected by irritating substances in the alimentary canal affecting those nerves, producing motor reaction which centers to the kidney area of the vertebral column, causing constriction of the longitudinal muscles and structures, occluding the nerves to the kidneys, and in such situations the adverse conduct of the kidneys, or rather their failure to completely perform their office, results in such changes of vibration back to the brain through the nerves ramifying the kidneys, and through returning nerves occluded because of occlusion to the kidneys, as to affect corresponding cortical areas to such an extent as to produce marked and continuous phases of chronic vertigo.

Because of the facts just stated, it will be understood that in all cases of vertigo, whether acute or chronic, the patient should have as complete rest of the alimentary canal as possible for a few weeks. In this connection, it is suggested that a fast of two weeks, accompanied by the ingestion of plenty of good water is an excellent thing.

If it is found impracticable to have a fast, then the patient should be put upon broths, which, for this purpose, should be strained, and kept upon them from one to four weeks, depending upon the time necessary for cleansing the body.

In any event, the Chiropractor should see to it that his patient has only the very lightest diet of easily digested substances, and but one thing at a time for several weeks, so as to give opportunity for the alimentary canal to empty itself of its toxins, and for the digestive glands to unload themselves of congestion in order that all of the reactive conditions shall be favorable.

Incident to the procedure just outlined, and in beginning the care of the case, high flushing with the long colon tube should be administered once each twenty-four hours, for from three to six or eight days, depending upon the gravity of the situation.

Relating in a case of chronic vertigo because of the situation just outlined, is required definitely at liver and kidney areas, paramountly, of course, at liver areas, and incidentally at kidney areas; at the liver for the purpose of freeing the fifth, sixth and seventh pairs of thoracic trunks, and at the kidney area for the purpose of freeing especially the eleventh and twelfth pairs of thoracic trunks.

DROPSY

Therapeutists have given the name dropsy to that phase of process where, because of adverse condition of the tissues of an area, or the tissues generally, liquids pass through membranes and vessels into so-called spaces of the body, through which they normally do not pass, filling such so-called spaces more excessively than normal.

Of course, it will be understood, that the reason liquids pass through membranes and vessel walls where they should not pass, is because such membranes and vessel walls are in such negative condition as not to present normal resistance to the pressure of such liquids.

In connection with this statement it is understood that lymph normally reaches every atom of animate tissue. It is also understood that it does so by normal means of transportation under the impulsion of nerve stimulus, through normal channels.

It is as easily understood that under occlusion of stimulus lymph is not propelled in the normal way, or in the normal amount, and that when it is not, there are excessive accumulations of it in areas, which amount to dropsy in that area.

Attention has been called, under the discussion of vertigo, to the fact that abnormal accumulations of lymph is one of the phases, which superinduces dizziness, and other adverse conditions of the brain in the production of certain phases of consciousness, as well as in its control of functional operations of the organism.

Like dizziness, dropsy occurs as incident to almost every phase of functional abnormality. But as it occurs in these instances, the therapeutists have not called it dropsy. This, however, does not change the fact. By way of illustrating this point, it is the accumulations of uremic poisons that cause that phase of abnormality called rheumatism. The therapeutists overlook the fact in this connection that the accumulations of such acids is not more nor less than a phase of dropsy, and of course, this same thing is true of pneumonia, tuberculosis, and indeed every other phase of abnormality.

However, the subject under discussion here is that aggravated and gross phase of tissue abnormality in which very definite and cellular displacement has occurred, and in which great accumulations of liquid have occurred, and under that general process which is Chiropracticly designated as plus liquidity, in which assimilation is greatly lessened, disintegration greatly increased, depuration greatly lessened, until preparation for abnormal cavities is pronounced, in which, due to

flaccidity and negativity of tissue much more than the normal amount of liquid accumulates.

Therapeutically, dropsy is classified as an infiltration into cavities, and, of course, this is true, whether the cavities are those which did exist, or those that have occurred by the process indicated in the preceding paragraph. For the purpose of a general understanding, the therapeutic names and situations will be here stated.

Anasarca is a general dropsy involving the entire tissues of the body in a general way.

Ascites is an infiltration into the potential cavity of the abdomen.

Hydrothorax is an infiltration into the potential cavities of the pleura, and pericardium of the thorax.

Hydrocephalus is an infiltration into the meningeal sacs or ventricles of the brain, or both, or a general dropsy of the brain tissues including the meningeal sacs and ventricles.

Hydrocele is an infiltration into the potential cavities of the scrotum relative to the testes.

Ovaricele is an infiltration through the capsule of the ovary into the potential cavities of that gland, and is frequently referred to as ovarian dropsy, or ovarian cyst.

In this adverse process, it is frequently the surgical method to excise the ovary, and this is sometimes necessary. It is necessary when the cyst has become so large that its relative pressures produce occlusion more rapidly than it can be reduced, and when, by the cystic dropsy, the ovary is practically or wholly disintegrated.

In a great majority of these cases, however, the application of the principles of Chiropractic will soon reduce the liquid accumulation, when the tissues of the ovary

will be completely restored. A still larger number of these cases will be saved without extirpation, when surgeons learn to aspirate an ovarian cyst without opening the abdomen.

In ascites, hydrothorax, and hydrocele, it is sometimes advisable to have aspiration performed, and it is always advisable to have aspiration performed where the relative pressure of the accumulated liquid is producing irritation, and motor reaction that result in occlusion, which can not be overcome by the principles of Chiropractic. As to when this situation has arisen, is always a matter for the ripe judgment of the Chiropractor in the given case.

Relating to remove dropsy will, of course, be directed to the primary areas of occlusion causing the dropsy. Paramountly, of course, it will be understood that the first attention should be to releasing occlusion of nerves to the large glands, such as the spleen, liver and pancreas; occlusion of nerves to the brain, and to the kidneys; these for the purpose of securing the necessary vital activity incident to overcoming the process. Next, the attention should be directed to all of the avenues of elimination. Careful relating should be addressed to the intestine, the lungs and kidneys. Incident to relating, all other means which have been found helpful, such as massage to the skin, enema when indicated for the bowel, and the very best of aeration and assistance to respiration should be employed.

HYDROCEPHALUS

The word hydrocephalus is taken from "hydro" meaning water, and "cephalus" referring to the brain.

The word, therefore, literally construed, means " water in or on the brain."

It must be understood that the situation therapeutically named hydrocephalus, is a very negative and degenerate tissue condition, presenting an aggravated dropsy.

The water of the dropsical accumulation is lymph, which is carried into the brain as blood plasma, and has accumulated there because of occlusion of nerve stimulus from being normally applied to the impulsion of liquid transportation in the sinuses and veins of the brain, and the lymph sacs, vessels and tubes.

In this tissue condition, blood capillaries, venules and veins, together with lymph structures of transportation, are flaccid, relaxed, and in a negative condition in ratio with occlusion of stimulus to the area.

In the situation outlined there is an excessive extrusion of blood plasma which is retained in the areas, distending all of the liquid-containing sacs and vessels within the markedly abnormal area, and if the case is sufficiently grave, within the skull cavity.

Occlusion of stimulus under this phase of abnormality is so widespread and grave that vasomotor stimulus is greatly and generally interfered with, not only in the brain, but in the whole organism, and because of this fact general assimilation is greatly reduced, while pathologic disintegration is markedly increased, so that there is a constant retention of morbidity.

In this situation it will be seen that the negative phase of process has been reached in the brain areas, and frequently in many other areas of the body, and so long as occlusion keeps getting graver and more widespread,

tissue conditions and general adverse processes will continue to get worse in ratio therewith.

The adverse chemistry is very irritating in its nature, and is constantly causing irritation and motor reaction in the more normal parts of the body, which of course results in aggravated phases of the affirmative process occurring concomitantly.

Generally, the phase of abnormality called hydrocephalus occurs as the result of instrumentation in delivery at birth, but, of course, many times occurs from falls, and other phases of injury, and may result from congenital and hereditary influences.

An injury to be sufficiently grave to produce this phase of abnormality must interfere with the transmission of stimulus to such an extent as to result in a continuous fever in the brain. The fever is not usually of such height as to attract particular attention. It may only be sufficient to cause a continual cerebral excitation, which causes the child to be classified as being precocious, for, of course, the phase of abnormality under discussion usually occurs in childhood.

Sometimes at the beginning phase, the child, for a short period, is looked upon as being unusually bright, but it is not long until the general health is noticed to be greatly impaired, especially the digestive organs, but particularly the stomach. It will also be noticed that the child's kidneys are abnormal, and soon thereafter it will be observed that all of the large, digestive glands are acting abnormally.

At about this time it will be observed that there is abnormal muscular conduct in the legs and arms, and the subject will complain of pain in the head and body,

radiating to the arms and legs, and the patient will become dull, moody and drowsy, but, it will be observed does not sleep well nor regularly, and if old enough will complain of dull, heavy headaches, and if too young to complain will show a disposition to lay the head down upon any convenient object, as if it were too heavy to hold up, and in connection with these symptoms, the child will be frequently attacked by spells of vomiting, not preceded nor accompanied by any sense of nausea, which is proved by the child attempting to eat something while in the act of vomiting.

About this time, if the child has been able to walk, the gait becomes uncertain, staggering and stumbling; certain muscles failing to respond to volitional impulse. Many times there is depression, frequently accompanied by stupor, and sometimes by delirium and convulsions.

In connection with the symptoms, a careful observation will reveal that the cranial sutures are distending, and the head enlarging with a dropsical accumulation. As this accumulation increases, the fever apparently subsides from the external aspect. However, this must not be taken as being true, for the internal fever remains.

If the process is not checked by proper aid being applied, the sutures of the skull are forced open, and the head continues to greatly enlarge.

The process at this phase may continue to enlarge the head until the segments of the skull are widely separated from each other, and until the head seems almost as heavy as the child.

When the process has reached the gravity indicated in the last paragraph, there is great impairment of some

of the brain functions. Sometimes the mind is wholly lost. At other times only certain mental phases are lost. One peculiar symptom of mental loss is a lack of consciousness of the stomach or its conditions. Smell or taste may either be lost, but are not usually. Sight and hearing are frequently affected. Sometimes one or the other, or both, are entirely lost.

In this phase of abnormality, the diet of the patient becomes a very important consideration, and it should consist as nearly as possible of the formula of which the body is composed, and should be administered wholly in liquid form; the reason for this being that the patient can not be induced to masticate food.

The liquids given should be vegetable and meat broths for the reason that the administration of dense albumens and proteids should be avoided, because of the marked debility of the digestive system. Therefore, no milk nor eggs should be given, and, of course, meat should be completely avoided.

What makes the matter of feeding the patient at this time so difficult, is the fact that the appetite must not be permitted to govern in any sense, for it is the rule that these patients, because of irritation, always express a voracious appetite; if they present any disposition to eat at all, or none as the other extreme.

Those having such patients in charge should approximate the amount and character of liquids to be administered, and fix upon the frequency of administration, governing themselves by the age and size of the patient, and remembering all the time that the administration of food in such cases is only to preserve life, until the adverse process can be controlled.

In the early steps of this phase of abnormality, it is not difficult to remove occlusion, and prevent further injury, and in due time to remove the phase of abnormality; this statement being based upon the opportunity to administer the principles of Chiropractic at or near the incipiency.

Like all other abnormality, there is a degree of gravity in this phase beyond which recovery is impossible, and in the later processes where the segments of the skull have become luxated to a marked extent, and dropsy is very great, with intense intra-brain pressures, and much destruction of brain tissue, and a general interruption of liquid transportation throughout the whole organism, the prognosis is bad.

However, it must be remembered that in some very adverse cases recovery has been had.

Since it is not known just how far this phase must go before recovery from it is impossible, it seems the duty of the profession to make a proper effort for the recovery of each case.

Relating in this phase of abnormality will, generally speaking, be the same as that in brain fever, indicated in Chapter IX, except that more attention must be given to removing occlusion in the nerves to the kidneys and intestine. It will frequently be found necessary to go very carefully, so as not to produce grave glandular reaction, and also in relating the segments of the skull. Removal of occlusion from the cervical nerves which contribute to the formation of the phrenic trunks, to overcoming adverse phases affecting the diaphragm is frequently indicated.

The practitioner must understand that in anything

like aggravated conditions of hydrocephalus, recovery will only result after long and persistent, careful and judicious effort. He should, therefore, not be discouraged if he does not appear to obtain an immediate response to his efforts; for it cannot be expected that recovery from such an adverse phase can be had except after the lapse of months.

CHAPTER XI

NERVES—ABNORMALITY

Pinched—Stretched—Distended—Cut—Torn—Inflamed Catarrh—Disintegrated—Neurasthenia.

Symptomologicly, it must be understood that any discussion of nerve pathology, which is sufficiently comprehensive to be general, must be also a discussion of nerve trunks, nerve fasciculi, nerve ganglia and nerves.

In this connection the student will recall that the therapeutic anatomies do not discuss anything incident to ramification but nerve trunks, the subject matter in connection therewith plainly disclosing that even when they are discussing what they call nerve filaments, the discussion is really applied to small nerve trunks. But in the present instance, the discussion distinctly includes all phases of nerve substance.

PINCHED—STRETCHED—DISTENDED

It will be seen that there is not necessarily any difference between nerves and nerve trunks in the symptoms arising from pinching, stretching or distending them; for if a nerve is pinched it is injured, and if stretched to the same distortion it is equally injured, and if distended to the same gravity, it is also equally injured. This is also true of nerve trunks, fasciculi and ganglia, all of these, of course from the tissue standpoint, and the same is true from the standpoint of occlusion.

Of course, the symptoms indicating pinched, stretched or distended nerves are paramountly the distortions of the areas of such nerves, and incidentally, the change of conduct at the terminals of the nerves involved, and many times in the affirmative phases the ganglia of the area of extension and ramification of such nerves.

CUT AND TORN

From the standpoint of symptoms, there is a difference between cut and torn nerves, and those which are pinched, stretched or distended, and that difference also applies as readily to nerve trunks.

Of course, it is not to be overlooked in a discussion of the symptoms of cut and torn nerves that nerves may be pinched, stretched or distended until they are completely occluded. This however, is not generally true, but in cut and torn nerves, it is always true of cut nerves or trunks, and it is true of that part of torn nerves or nerve trunks which are wholly severed.

In this connection these difficulties are easily ascertained by a careful examination of the relative structures. Here again the paramount symptom is the result at the ends of the nerves. Of course, it cannot be denied that the paramount symptom of a cut nerve or trunk is its severance, and that the same is true of a torn nerve or trunk.

INFLAMMATION

As an incipient proposition, when nerves are pinched, stretched, or distended there is motor reaction, which results in a concentration of stimulus from a widespread cortical area to the area affected, with the result that

there is congestion of the liquids of transportation, with swelling and increased friction, so that an inflammatory phase of conduct is produced. This applies to nerves and nerve trunks.

Of course, it must be stated that as to individual nerves, the statement here made is purely deductory, but it is based upon the necessary result that must follow as incident to acute occlusion.

As to nerve trunks, it is a matter of the most common knowledge that under acute occlusion they always undergo an inflammatory process; the paramount symptom of which is great soreness upon touch over the area of the nerve trunk, which is sometimes swollen to such an extent that the pathway of its immediate extension is plainly observed upon the surface.

Nerve trunks also undergo inflammation as a result of being immersed in certain toxins produced in the body. These toxins are usually classified as being of a rheumatoid character, or as of being incident to a general acidosis.

Many pathologic crimes are laid at the door of acids and acidity, which are indeed very difficult of proof. It seems perfectly clear that inflammation of nerve trunks or nerves do not always depend upon acids, but may be produced by irritation of many characters of toxins that form in the body, which may be very far from acid in their nature. However, since there is no definite proof on this subject, it will be passed with the present interpolation.

Of course, the area of cut nerves or nerve trunks is always inflamed, but that is because of the shock and toxic irritation to the terminals of other nerves, for as

to the severed part of a nerve, or nerve trunk, there could be no inflammation produced in it, except by relative influences. There would, however, be inflammation in the animate trunk or nerve at the place where it was severed.

The same rule would hold true in regard to torn nerves or trunks as to the parts severed.

Inflammation of nerve trunks has been therapeutically denominated "neurosis." Of course, the name is too general to be of any value, but the Chiropractor is cautioned that in case of inflammation of a nerve trunk, he is not to address himself to the immediate tissue of that trunk, nor the osseous structures which construct the foramen for it, but he is to address himself for the relief of the trunk to nerves which ramify that trunk, and is to secure the removal of inflammation by releasing occlusion in those nerves, afterward directing proper address to the area of the trunk directly inovlved, when the time to do so has come, which is always a matter of judgment.

CATARRH

Incident to the process of inflammation of nerve trunks, there appears that phase of process dropsical in its nature, which by analogy is catarrh.

To put the proposition in such shape that the student will readily understand it, he must know that during the period of inflammation of a nerve trunk there is excessive retention of disintegrated matter, so that as the inflammation declines, the catarrhal or depuratory process obtains.

Generally the catarrhal process does not become pro-

nounced, but only amounts to a phase of the inflammatory process. However, sometimes the catarrhal process in nerve trunks becomes a marked phase of adverse process. In such condition, the exudation and elimination from the nerve trunk seriously affect the terminals of relative nerves, and results in a condition ordinarily called a sore, which is very difficult indeed to heal. What the therapeutic world has usually referred to as "old sores," "white swellings," etc., are examples of the character of adverse process under discussion.

In the adverse process just discussed, it sometimes becomes very difficult to secure drainage from the area, and aside from the relating necessary to free the nerves to the area, and the direct relating process to the area itself to accomplish drainage, must be observed and performed.

The method of accomplishing the character of drainage referred to cannot be described on account of the universality of its application, and the means of attaining it may only be demonstrated in clinic.

DISINTEGRATION

Sometimes as a result of aggravated inflammation and catarrh of nerve trunks and relative tissues, other nerve trunks are immersed in a very toxic morbidity.

In the condition just referred to, frequently those other nerve trunks not only undergo occlusion as a result of such chemistry, but actually undergo disintegration to such an extent that rehabilitation of the nerve trunks so affected, and the relative tissues can not be accomplished.

The fact is that disintegration of very small nerve

trunks, usually referred to as filaments, or small fasciculi, very frequently undergo disintegration in many different parts of the body, but the areas occupied by the same are so small in comparison, and are so well supplied from elsewhere, that the actual results escape the knowledge of the observer.

The disintegration of nerve trunks is very frequent in different phases of paralysis, palsy, atrophy, anaemia, and many other phases of abnormality.

By the statement just made it is intended to convey knowledge of the situation incident to permanent disintegration of nerve fasciculi and trunks. In this connection it must be also understood that temporary disintegration occurs as incident to almost all phases of so-called acute abnormality, peculiarly in the areas of stasis.

Nerves that have undergone temporary disintegration, rehabilitate themselves upon occlusion to the area being removed, so soon as depuration of the stased substances is accomplished.

As to the methods of securing relation in this phase, the remarks as to catarrh are controlling.

NEURASTHENIA

This word by no stretch of the imagination could ever be correctly used as a word belonging to Chiropractic. From the standpoint of Chiropractic, no word could be more completely meaningless than neurasthenia.

The therapeutic consensus of opinion seems to give to this word the sense of exhaustion of some part of the brain or nerve system. The therapeutic profession seems to think that because of the lack of control, which is

paramountly apparent in what they call neurasthenic patients, that, while the brain and nerves are laboring under some phase of exhaustion, still they credit them with over action, for the paramount symptom of the patient from their standpoint is excitability, nervousness and lack of control.

It is perfectly clear that if the brain and nerves are in such condition as to cause the individual to be highly excitable, restless and continually disturbed, it is the most complete proof that the brain and nerves are not exhausted, and the symptoms indicated are those of the neurasthenic.

The symptoms of so-called neurasthenia are adequate proof that the brain and nerve system is not exhausted, neither as to a part nor the whole of it, but that it is being irritated by abnormal relationship to it in some part of the organism.

By way of illustrating the statement in the last paragraph, the student's attention is called to the fact that any distortion of tissue presents as one phase of it, the irritation of the nerve terminals and nerves throughout the area of distortion.

It, of course, follows, as a necessary corollary that the length of time that distortion and occlusion have existed, and therefore, the extent and character of accumulated morbidity, will have a marked effect upon the extent of irritation, and therefore, will be largely controlling in the so-called symptoms of neurasthenia.

Overaction, with regard to the brain and nerves, is an inconceivable proposition. The only way in which the brain and nerves could overact would be by receiving, transmitting and applying to tissue elements too much

stimulus; a thing which need not be feared, and it does not occur.

It is not that the brain and nerves overact in the sense of receiving, transmitting and applying too much stimulus, but that they undergo irritation in the areas of distortion, therefore, instead of accomplishing the intended results with smoothness, rhythm and ease, they accomplish what results are possible in tissue production and maintenance, with all characters of non-ease and adversity.

As proof of the statement last made, the therapeutic world expresses the situation by the statement that the patient is nervous, is hypersensitive, and a subject of irritability. The fact is actually to the contrary. The patient is acting under the extreme irritation of distortion, and therefore acts in the irregular manner described.

The therapeutic world has never understood the cause of disease, and there are a multiplicity of phases of abnormality, the causes of which they do not even assume to know, in which it is observed that the person is weak; that his organs do not absorb, aerate and assimilate substances to properly maintain the tissues of his body, and that these symptoms are accompanied by mental irregularity, and physical unreliability.

To the whole group coming under the last description, therapeutists apply the terms, general nervous debility, nervous prostration, nervous exhaustion and neurasthenia. It has been already stated as to these that they are caused by irritation of the nerves and brain on account of distortion.

In connection with the distortions that irritate,

resulting in the many and varied symptoms assigned to neurasthenia, it must also be understood that as one of the prominent phases of such difficulty there are anomalous tissue formations, congenital distortions, and a long line of varied phases which are remarkable for their affects.

Some of the distortions referred to in the preceding paragraph are incapable of removal, and in such cases the person is consigned to suffer from the irritation incident to his adverse construction, ameliorated only by such accommodative changes as the organism is capable of making to that end.

The reference in the last paragraph is to abnormal joint formations, fractures in foramina, encroachment upon certain foramina by exostosis and calcareous accumulations, ankylosis or calcification of certain joints, in aponeurotic foramina along the sides and margins of bones, and deposits of solid residue, gumma, etc., in nerve paths, ganglia, and plexuses.

Fortunately, nearly all of the conditions referred to in the two preceding paragraphs can be ameliorated or wholly removed, but there are some joint foramina that cannot be corrected, and there are certain foramina that cannot be reached for assistance, and other conditions referred to that cannot be removed.

Relating in this phase it is observed is altogether too general in its nature to set out or specify, for in a general way it includes the entire tissues of the body. Of course, it paramountly includes the area of distortion, but incidentally through liquid transportation, includes the whole organism. It must, therefore, be left to the sound discretion of the Chiropractor in connection with his

instruction as to securing relation in any part of the body, to intelligently direct his efforts to the greatest assistance in the removal of the particular phase of distortion.

Securing the relation of the segments of the skull itself is of course a paramount part of the Chiropractor's work. He will proceed in this matter with the utmost care, for of course, he will understand that every change in the position of a skull segment produces pressure upon the brain itself. He will have to go very slowly, and with much caution, and be governed by the results of his work, indicated by the symptoms manifested, following what he does.

Of course, incident to his efforts he will understand that proper diet, removal from excitation, reduction of all environmental situations which might irritate, etc., are of paramount necessity, and that the actual conduct of the patient as to his life in every department of it, is of the utmost importance, if recovery is to be had.

CHAPTER XII

SPLEEN—ALIMENTARY ABNORMALITY

General Discussion—Congestion—Inflammation—Catarrh—Abscess—Spleen Cake

The therapeutic profession has not as yet declared the function of the spleen. By innuendo they let it appear that they think possibly that the spleen may have something to do, in a very distant and indirect way with digestion, but they have never attempted to explain how it aids in digestion, or why they think it does.

Therapeutists also indicate that the spleen is an organ which has something to do with the production of leucocytes, or lymph corpuscles, and in that way has something to do with controlling disease.

It has been repeatedly set forth that leucocytes of a certain type are disease germ fighters, and that the characters so classified are produced in large numbers in the spleen.

The proposition of leucocytes being disease fighters is supported by so little evidence that the subject is hardly worthy of discussion as a separate topic. However, since the fetish has been quite generally promulgated, it is perhaps only just that a few thoughts be addressed to it.

It is undoubtedly true that the spleen is the seat of production of a large number of leucocytes; indeed a larger number in proportion to its size than is produced in any other of the large, well-organized glands. Yet, it

must be understood, as a general proposition, that all of the glands of the body are rich in the production of leucocytes, since their structure is largely lymphoid, and they all contain a large number of lymph glands.

It is one of the best known facts of physiology that lymph glands, no matter where located in the body have, for their paramount office, the production of leucocytes.

It is also well known that if it were not for the general production of leucocytes in the lymph glands of the body, the white corpuscles of the blood would not be supplied, since the white corpuscles are only leucocytes that have passed from the lymph glands carried in suspension in the lymph vessels, into the veins where they are immediately designated white corpuscles.

No proposition is better established and sustained in the science of Chiropractic, than that through the untrammelled nerves, these glands are stimulated to action, and to the production of leucocytes, and that occlusion of such nerves results in the lessening of the production of leucocytes.

If the student will combine the statements of the last three paragraphs, and apply the result to the large glands, and especially to the spleen, he will have a very complete illustration of the fact, and will understand wherein the therapeutist has made his mistake.

That is to say, since the large glands, and especially the spleen, are rich in the production of leucocytes, when the nerves to them and it are not interfered with, it of course follows that when the nerves to the large glands are occluded, and for the purpose of this discussion, when the nerves to the spleen are occluded, there is a proportionate reduction of leucocytes, and hence a

proportionate reduction of the white corpuscles of the blood.

It is a fundamental principle of the science of Chiropractic that in such phases of abnormality as malaria, typhoid, etc., nerves ramifying the large glands of the body, to wit, the pancreas, liver and spleen are extensively occluded, and therefore, there is a serious reduction in the white corpuscles as the phase of disease increases in gravity.

It will be seen, in the situation outlined in the preceding paragraphs, that so long as the phase of abnormality is increasing in gravity, there will be a proportionate decrease in the production of leucocytes; and of course, when the meridian of gravity is reached there will be immediate relaxation, resulting in lessened occlusion of stimulus to the large glands and for the purposes of this discussion to the spleen and therefore, a very rapid increase in the production of leucocytes, which will immediately pass into the blood, very rapidly increasing the number of white corpuscles, which in their virile activity, will rapidly take up and carry the toxins of disease to points of depuration and elimination.

This great increase of leucocytes and white blood corpuscles, performing the rapid work of cleansing the body, is the situation that the therapeutic world has mistaken for the great war between disease germs and leucocytes, which they have depicted so vividly, but which really is a very common occurrence when viewed under the light of actuality.

It must be said in justice to the therapeutists, that those who depend entirely upon symptoms for their knowledge of disease and functional operations, cannot

tell just when a phase of abnormality has reached its climax. Indeed, they do not think it has done so until a considerable time after it actually has done so; for they must await until outward symptoms declare the change.

Now, it is perfectly clear that the actual functioning in the deep tissues of the body, to produce those symptoms begins a considerable period before the symptoms are manifested outwardly, and the paramount change is the lessening of occlusion of stimulus, to which reference has been made.

In other words, the actual change that takes place is the relaxation of the deep tissues of the body lessening occlusion of stimulus which results in the production of a large number of leucocytes. And when this happy result has been accomplished the outward symptoms of the patient show marked improvement, so that the waiter for ordinary symptoms is able to declare that the crisis is passed, and the patient getting better.

There is no doubt that the spleen is as important in its accessory relation to digestion as is the liver. Indeed, it furnishes a very large quota of necessary chemistry to the liver in order that it may perform its functions. These facts are fully set out in "Psycho-Bio-Physiology," the first volume of this series, to which the student is here definitely referred.

It is also true that the spleen exercises a remarkable influence upon the general lymph of the body, and therefore, upon the blood. Not only in the matter of its very rich production of leucocytes, but in certain chemical changes in the lymph and blood, as these fluids pass through it.

It is well known that the spleen is the place of the disintegration of a very large number of red corpuscles, which of course results in the lymph and blood leaving the spleen, carrying in suspension the chemistry that has accumulated in the corpuscles through a long process of oxidation and dioxidation.

That the spleen is of great value to digestion, and other incidents of animation, is well established by its great congestion of blood immediately upon the ingestion of food. Such function would not occur with regularity if marked changes in the liquids of transportation were not to be accomplished in the organ where such conduct occurs.

CONGESTION

The spleen is frequently subject to congestion, and congestion used in this sense sustains no relation to the use of the same term in the last paragraph; congestion here meaning a pathologic situation, or a retention of liquids in the spleen to the accomplishment of a pathologicly abnormal size.

Congestion of the spleen in this particular may be accompanied by a great enlargement of the organ. Indeed, the very function of the spleen, as already referred to, makes pathologic congestion of it rather easier than in other glands. Of course, there are two phases of congestion of the spleen. There is acute congestion so called, and chronic congestion, and these should be discussed in their order.

INFLAMMATION

In acute congestion of the spleen, the paramount

feature of the congestion is of course inflammation.

Congestive inflammation would not occur except as the result of occlusion in nerves to the spleen.

When occlusion of stimulus to the spleen exists there is congestion accompanied by inflammation, which simply means the concentration of stimulus to the spleen from a wider area than normal, with increased vibration, friction, and therefore, heat. When, in the acute phase, occlusion of stimulus is reduced, the inflammation subsides, and is followed by another pathologic condition.

The paramount symptoms of acute congestion and inflammation of the spleen are occlusion of stimulus to that organ and the elevated temperature of it.

CATARRH

Catarrh in the spleen follows a reduction of acute inflammation, and in this situation the accumulated toxins, and disintegrated matter, that resulted in the inflammatory stage, is depurated from the spleen through the liquid transportation.

Catarrh of the spleen is very much more frequent than is generally supposed; the functions of the spleen being to a large extent of a secret nature, on account of its having no ducts of elimination makes catarrh of the spleen a difficult phase of abnormality to detect.

The inflammatory and catarrhal phases of the spleen are usually indicated by a lessening of the number of white corpuscles in the blood and by low and continuous fever, which appears to have no definite cause.

ABSCESS

Abscess of the spleen occurs as incident to long con-

tinued inflammation within it In such cases the patient is usually very much weakened; has generally undergone symptoms of nausea, great weakness, and has passed through a marked fevered condition, in which the temperature as a rule does not rise very high, and is usually, therapeutically designated, a walking fever of some kind or other.

Abscess of the spleen usually subsides without more than a very trying process. However, abscess of the spleen may, but not frequently results fatally.

Usually abscess of the spleen is not recognized by the therapeutic world until the situation has reached [illegible] in an aggravated phase that recovery is impossible. Consequently, such a situation would not be reached under the application of the principles of Chiropractic, for the obstruction to the nerves would have been removed, and the difficulty overcome before the abscess stages were reached, and even if the abscess stage has been reached, still there would generaly not be much difficulty in overcoming the situation by the application of the principles of Chiropractic.

SPLEEN CAKE

Sometimes where congestion and inflammation of the spleen have been great and prolonged, and the organ has become four or five times its normal size, reaching down into the left flank, the final result is the formation of what is called spleen cake.

Spleen cake, so-called, is simply a hardening of the substance of the spleen in various parts, or in certain parts of it, so that in palpation on the venter the rigid area may be localized.

This phase occurs as a sort of compromise between catarrh and abscess. It is usually a very serious condition, and if it is of marked density, and covers a wide area, the patient usually does not recover. In addition to the symptoms already given, that of spleen cake is merely the rigid area of the spleen.

One of the pronounced and regular symptoms of spleen abnormality is a peculiar greenish-yellow or moss-colored appearance of the skin. A very careful examination of the skin will detect this discoloration in any of the phases of spleen abnormality of the chronic type. The discoloration in the earlier phases occurs with a dry parchment-like skin, but later with a s[illegible] velvet-like condition.

Relating to remove splenic conditions will [illegible] definitely to free the nerves from the sixth to the ninth thoracic areas.

CHAPTER XIII

LIVER—ALIMENTARY ABNORMALITY

Affirmative: Congestion—Inflammation—Catarrh—Enlargement—Abscess

Incident to abnormality of the liver, it must be remembered that, since it is the largest gland in the organism, it is related to a very wide range of tissue degeneracy. These phases of tissue degeneracy have a part in practically every phase of tissue abnormality that occurs.

The statement just made is true, because when there is tissue abnormality of the liver, there is also abnormality of its function, and when the function of the liver is abnormal, toxins are produced, which are rapidly distributed throughout the organism, and by the irritation of the terminals of nerves, through the process of motor reaction, immediately result in the production of abnormal tissue and function at all places where there are accumulations of toxin.

Because the liver is an accessory organ to the alimentary canal, and therefore, to digestion, it is discussed under the present title, but in many phases of abnormality it will be necessary to refer the subject to the liver, and its abnormality, in order to understand just how such phases come about.

It will be remembered that the liver is a loosely constructed, lobulated structure, and that it is composed of a very soft, friable substance, and is very rich in

vascularity; having a very rich lymph and blood ramification, and it is primarily on this account that the tissues of the liver so readily become abnormal.

It will also be remembered that the liver is the seat of the elaboration of three very important compounds, to wit: *uric acid*, *glycogen*, and *bile*.

Generally speaking, bile is the only one of these substances that has been discussed in connection with the alimentary canal, and glycogen and uric acid to some extent in connection with other phases of abnormality. It must be understood that such discussions are short-sighted and incomprehensive.

Abnormality of the liver results in the production of abnormal glycogen and abnormal uric acid, just as surely as it results in the production of abnormal bile. And abnormal glycogen and uric acid result in the production of abnormal tissues in the areas in which they accumulate or precipitate, just as surely as does abnormal bile, and they are irritants to the alimentary canal just as surely as is abnormal bile.

In order to present the alimentary abnormality of the liver, as well as all phases of tissue abnormality thereof, it is necessary to discuss liver tissue under the affirmative and negative phases, and this chapter will be directed to the affirmative process.

CONGESTION

Congestion of the liver occurs as the primary reaction from any kind of shock which has resulted in occlusion of nerve stimulus to the liver, and therefore, of course, would be the first reactive effect from occlusion produced either by trauma or chemical adversity.

The student must make a careful mental distinction between congestion in the phase now being discussed, and enlargement; for in a sense these are two distinct processes, although there are distinct aspects of similarity between congestion of the liver and enlargement of it.

However, congestion, as it is now being discussed, is conceived to be a very much more acute phase of tissue abnormality than enlargement of the liver.

Congestion of the liver is present when, because of occlusion of nerve stimulus to the liver, the vaso-motor influence is not being carried out sufficiently to prevent excess accumulations of lymph and blood in the liver. In other words, congestion of the liver consists in the excess accumulation of liquids, with an excess of solids, either held in suspension or precipitated—usually held in suspension in the liquids.

INFLAMMATION

Succeeding congestion of the lymph and blood with toxic accumulations, there always follows inflammation of the liver.

The student must not suppose that the whole liver is always involved in such congestion or inflammation, for only a small part of it may be acting under congestion, and therefore, only that relative part responding in inflammation. However, in such a situation the temperature of the whole liver will be markedly raised, but raised differently according to nearness to the center of super-heat.

When there is congestion of the liver, accompanied by the toxins of accumulation, the tissues will be filled

excessively with the accumulation, injuring the terminals of nerves in the area by excess pressure, and by being submerged in abnormal chemistry—both of which conditions amount to irritation, which produce motor reaction, and wider and more intense constriction, and therefore, occlusion of stimulus from a wider area.

Happily in such cases, usually the irritation produces motor reaction and concentration from such a wide cortical area, that depuration of the congested liquids is rapidly accomplished, together with neutralization of their toxins. If this result occurs, congestion quickly subsides, and normal tissue and function is soon re-established.

However, sometimes the toxic accumulation is so great, and virulent and the pressure so intense, that even with the profound motor response, it is impossible to depurate the congestion, or neutralize the toxins. In such a case the process is fatal, and soon results in dissolution.

Congestion of the liver in fully ninety per cent of cases is the result of eating to excess, and also of eating badly selected, and badly combined foods. However, it must be remembered that the character of food selected is not of so very great importance, if only a small amount of it is eaten. The paramount difficulty is the excess ingestion of foods of no matter what character. But, of course, the situation is aggravated by inhospitable combinations of food.

CATARRH

Following an inflammation of the liver, where occlusion of stimulus has been overcome in apt time,

or where motor reaction from a sufficiently wide area has occurred, there always follows catarrh resulting in the process of depuration of the excess liquids, and neutralization of the adverse chemistries.

Catarrh of the liver in such a case could only be within the area affected, and will usually be of brief duration, because in cases such as outlined in the preceding paragraph, the whole adversity quickly subsides, and normal tissue and function is soon restored.

It sometimes happens, however, that either because of a prolonged congestion and inflammation, in which there has accumulated a considerable quantity of morbidity, or because of difficulty in reduction of occlusion as a result of subluxation or distortion affecting nerves to the liver, the congestion and inflammation are very slowly overcome. In such cases there is a prolonged catarrh, for of course, as a sequel to congestion and inflammation of the liver, catarrh must follow until complete depuration, neutralization and elimination has been accomplished, and these will not be accomplished until abnormal tissue incident to the congestion and inflammation has been completely disintegrated, and a new and normal tissue reintegrated.

Catarrh of the liver is sometimes prolonged for years and is a very disastrous and destructive phase of abnormality, not only affecting the liver tissue, and the alimentary functional relation of the liver, but adversely affecting the entire tissues of the organism.

ENLARGEMENT

Following prolonged congestion, inflammation and catarrh of the liver, there frequently occurs a somewhat

permanent enlargement of the tissues of the liver.

It will be understood that enlargement of the liver is a very grave tissue abnormality, and never occurs as an acute phase, but is always the result of a prolonged and chronically, abnormal process.

Enlargement only occurs when occlusion of stimulus to the liver results in a continually retained, abnormal chemistry of a coarse, granular type, so that a somewhat giant-celled structure of the liver is produced through the process of an indifferent assimilation with lessened cohesion, which, of course, is always the subject of congestion, with a low phase of inflammation.

The adverse process just described sometimes results in the liver becoming almost twice its normal size.

Ordinarily in enlargement of the liver, the extension downward may be ascertained by palpation in the right hypochondrium, behind the chondral margin of the ribs. The extent of the enlargement can usually be approximated from such a palpation. However, it is also well to take into account the amount of extension ventralward, incident to the right hypochondrium, and also a careful examination of the costal aspects of the body over the liver area, for many times in enlargement of the liver the ribs relative to it are displaced dorsalward, and laterally, with change of curvature.

Of course the distortion of the ribs just described in enlargement of the liver, only occurs incident to very excessive phases.

ABSCESS

Incident to inflammation and enlargement of the liver, abscess frequently occurs.

Abscess of the liver, occurring as incident to inflammation, is caused by the toxin of congestion being so virulent upon the terminals of the nerves in certain areas, as to result in inanimation of the nerves and tissues of that area. Or in such adverse process, relative pressures are so great as to render inanimate the terminals of the nerves in an area, resulting in the formation of abscess.

In either of the two methods just described, the abscess or abscesses produced are usually very small, and the area destroyed as a result is usually almost entirely restored, when occlusion to the nerves is removed, and new terminals have had time to form. Abscess also occurs in enlargement of the liver, and, while it is common for a great number of small abscesses to occur, as incident to a prolonged enlargement, it very frequently happens that very large abscesses occur as incident to such enlargement.

In enlargement of the liver, abscesses occur just exactly in the same manner as they occur in inflammatory phases; the difference being that they are usually larger, and present a greater menace to animation.

It is sometimes necessary to drain the larger abscesses of the liver surgically, and this is indeed a very dangerous and questionable relief, and seldom meets with success, but under a very adverse situation would be a justifiable last resort.

In ordinary abscess of the liver, relating to release occlusion, with proper attention to diet, will usually cause small abscesses to disintegrate, and depurate through the ordinary channels, and the tissues of the liver to be entirely restored.

It must, of course, be understood that in inflammation, catarrh, enlargement, and abscess, the general functions of the liver to the whole body are as abnormal as are the tissues of the liver, and that therefore, abnormal uric acid, glycogen, and bile are being produced.

Abnormal bile is incipient in liver alimentary abnormality, and such abnormality can only be corrected by a correction of the tissues of the liver.

Relating of distortion to release occlusion of nerves to the liver should be performed at the fifth, sixth and seventh thoracic areas. Of course, there will be incidental corrections, which are releasing the phrenic nerve trunks, and many times the pneumogastrics.

CHAPTER XIV

LIVER—ALIMENTARY ABNORMALITY

Negative: Exuding Catarrh—Gall Stones—Dropsy—Atrophy—Cirrhosis—Displacement

It is the purpose of this chapter first to describe the negative process in the liver, and then to proceed with the discussion of the general phases and symptoms of negative liver tissue abnormality.

It will be understood that under the negative phase of functional operation, there are no distinctly elevated temperature conditions to discuss, but on the other hand the thought is directed specifically to negative phases in which there is a sub-temperature, or, at least, in which there is a negative phase incident to a not-very-well defined affirmative process.

In the negative phase, the liver tissue is always found in one of two conditions of distortion: first, a relaxed, distended, flaccid condition, in which there is an excess of liquidity; second, a condition in which the size is lessened with increased density.

The first of the two conditions just detailed is more acute than the second, and exists because, as a result of prolonged occlusion of stimulus in the nerves to the liver, assimilation has been decreased, and disintegration increased with chemical changes of such a nature that there is very indifferent cohesion.

In the situation just described, the potential spaces, which would always be actual spaces if it were not for

normal tone, have not become spaces but have been distended by the influx and retention of a colloid of an abnormal thickness.

In the second condition indicated, the more acute phases have passed; the solids of the colloid have precipitated, and the lymph therefrom eliminated so that, from an excess liquid condition, the tissue areas have reached a minus-liquid condition.

From the situation just outlined, two results must necessarily occur: the tissues will become smaller, and of greater solidity. These two phases of result are to be dealt with later in this chapter under the names of atrophy and cirrhosis.

It will be seen that, as a general result of the adverse phases of the affirmative process dealt with in the last chapter, and the additional fundamentals stated herein, the condition of the lymph and blood within the liver must undergo marked changes.

The changes that take place in the lymph, in the negative process, is a continual decrease in the production of leucocytes in proportion to the increased occlusion of nerve stimulus, and of course, an increase in the amount of toxin carried in the lymph.

The toxins of the lymph will be progressively retained in the liver in ratio with the decrease of stimulus to that organ, because in that ratio the lymph will fail to carry the depuratory substances from the ever increasing disintegration from the organ.

The discussion so far is based upon the proposition of a continuing increase of occlusion of stimulus to the tissues of the liver. To complete that phase of the discussion, it is only necessary to say that if occlusion

be lessened, all of the symptoms detailed would change in ratio therewith, until the process returned from the negative to the affirmative.

Since this is a discussion of alimentary abnormality, it is necessary to say that under the negative process, in liver tissue, the bile produced will be of a very abnormal chemistry, and under the first phase of the negative process, it will be very copious, and of a very irritating nature to the intestine.

Under the copious discharge of abnormal bile into the intestine in the negative phase, there occurs all of the profoundly adverse situations incident to what are ordinarily called liver reactions, which occur as incident to many phases of abnormality; not only in the process of disease, but reactions necessary to regain health. These, however, will be detailed in connection with the phases of abnormality in which they occur.

It is sufficient for the purpose here to say that under some phases of the affirmative process, and many phases of the negative process, it will be necessary to secure a copious depuration of abnormal bile from the liver into the intestine, as a preparatory step to reconstruction of liver tissue, and since abnormal bile, under such conditions is toxic in its nature, that process is always accompanied by certain elements of danger.

In this connection it must also be remembered that at the same time bile elements will be distributed throughout the system, as will also abnormal uric acid, and glycogen, and the effect from all of these is sometimes profound, and occasionally fatal.

It is necessary, however, in order that the tissues of the liver shall be reconstructed, and again returned to

the normal, that this depuratory process shall be accomplished. The Chiropractor can usually control the rapidity with which it is accomplished, and the whole matter appeals to his sound discretion in the given case.

It is the proper method in securing a depuration of these accumulated toxins, for the Chiropractor to observe carefully all of the symptoms, and secure the depuration only so fast as the resistance of the organism can meet the situation; increasing the rapidity of depuration or decreasing it as he observes the necessity in the particular case.

EXUDING CATARRH

The negative phase is always a sequence to the affirmative process, and of course, the exudations from inflammation are catarrhal in their nature. The excessive discharge of abnormal bile, glycogen and uric acid just referred to are in their nature catarrhal exudates.

Analogously liver tissues must act under the catarrhal exudating phase, until depuration of abnormal chemistries have not only been accomplished, but until rejuvenation has returned the tissue practically to the normal—at least to a process of such affirmative type that there will be no further exudation; for it is well known that affirmative procedures of a very active type are not accompanied by catarrh.

GALL STONES

In enlarged and inflammatory conditions of the liver, the abnormal bile produced, is frequently .a colloid,

which tends, to precipitate thus hindering elimination.

In the phases just referred to it not infrequently happens that certain of the ingredients of bile tend to precipitate, excluding their liquids so that the residues are of a waxy or doughy nature. Usually such substances are not recognized so long as they are in the ducts of the liver, or have been discharged into the intestine, where their presence could only be recognized by symptoms of intestinal irritation.

It is when bile of the character just described is stored in the gall bladder that it may enter into such profound precipitation as to cause its presence to be recognized.

The precipitation of bile in the gall bladder occurs in such manner as to produce two results. One, a wax-like pithy substance, which in passing through the cystic duct out of the gall bladder, and through the bile duct into the intestine produces much agony and the general symptoms of biliary colic.

The symptoms incident to passing one of these bile piths is not distinctly different from that of the passage of a gall stone, except that the spasm is not so long, but is usually more sudden.

The second phase of precipitation of abnormal bile in the gall bladder results in the production of what are called biliary calculi, commonly called gall stones.

In this phase of the process, the chemical elements of the bile actually solidify until they become very rigid, and are called stones.

Sometimes many gall stones of small size form in the gall bladder, and sometimes biliary calculi of very large size form. Occasionally, practically the entire contents

of the gall bladder solidifies into one immense gall stone.

The inundation of gall stones with normal bile, usually serves to disintegrate them if the process has not gone too far.

When the process has gone too far, they must be passed as stones through the cystic duct, if they are sufficiently small for that purpose, which is a very painful procedure, marked with all of the symptoms of spasmodic colic centered to the area, accompanied by slight rise of temperature; the pain coming on at intervals incident to the entrance of a stone into the duct, and increasing as the stone slowly progresses, terminating suddenly as the stone escapes followed almost immediately by another spasm ended by the stone escaping from the common duct to the intestine.

At this stage of the situation, if the stones are so large that they do not readily pass, and are causing marked irritation, the only means for their removal, now known, is by the surgical method, which has never proven wholly satisfactory.

ATROPHY

There is in the tissues of the liver, acting under the negative phase, a descent from the normal size, presenting a minus liquidity and a density of structure accompanied by marked changes in the liquids of transportation. This situation is technically called atrophy.

In atrophy of the liver, there is in the first consideration a lessened production of leucocytes, and therefore, a lessened production of white corpuscles, accompanied by marked retention of depuratory solids to the exclusion of liquid.

There is in this situation also a lessening of liquid to the liver, because the bile discharged into the intestine has been of a very abnormal nature, and therefore, the volume of portal blood is greatly lessened, and rendered toxic, so that the amount of blood brought into the liver is greatly reduced, extrusion of lymph is proportionately lessened, and the lymph that is extruded is heavily loaded with toxins.

In this situation, of course, the blood that does go to the liver, especially that through the portal vein, is greatly lessened in white corpuscles, and because of the marked increase of carbon dioxide with reduced oxygen, presents a great decrease in red corpuscles.

In such a situation the immediate symptoms will be evidenced in decrease in the size of the liver, and a subtemperature of that organ. The general symptoms will be those of prostration, great weakness, melancholia, inactive heart conditions, with a loose, relaxed condition of the skin, and many times with wet, cold hands and feet.

CIRRHOSIS

Cirrhosis of the liver is a condition that occurs as incident to atrophy, and of course is, therefore, always a sequel to prolonged enlargement of the liver.

This phase occurs for the same reasons that atrophy does, except that in cirrhosis there is retention within the tissues of the liver of precipitated solids, which have resulted in an abnormal, and low form of assimilation producing a dry, fibrous tissue condition.

To the extent that the tissue change indicated in the last paragraph has occurred in the liver, cirrhosis is a

graver abnormality than atrophy, for in overcoming it these phases of abnormal tissue must be disintegrated, and the colloids arising therefrom must be depurated from the liver, which increases the gravity of the reaction to a considerable extent. Cirrhosis of the liver results fatally much more frequently than atrophy.

If the principles of Chiropractic are applied in apt time, no such conditions as atrophy or cirrhosis can occur.

All of the symptoms of cirrhosis have been detailed with respect to atrophy of the liver, with the exception of those that immediately appertain to the tissues of the liver, which are a feeling of tenseness and hardness of that organ, which may be ascertained by palpation under the right costal arch.

The general symptoms are also more pronounced, the prostration more profound, and the mental attitude more abnormal and usually of a more fixed type.

DISPLACEMENT

By the use of the term displacement, with regard to the liver, it is not intended to refer to the whole organ, although that occurs in connection with distortions of the body as incident to accommodations enforced by the law of compensation. It is the present intention to direct the student's mind to portions of the liver only.

The displacement which occurs most frequently is that of the left lobe of the liver, by being forced ventrally, the left extremity being brought around to the right, so as to come down ventral to the stomach.

The danger in such displacement of the liver is hemorrhage, occurring as the result of the rupture

of small blood vessels, which may easily happen on account of the friability of the organ.

Hemorrhage, in such an instance, discharges the blood into the potential cavity of the abdomen, and is an irritation of a profound type, producing by motor reaction, a widespread occlusion in all of the nerves ramifying the abdominal cavity; the ultimate effect of which is to occlude the principal nerves controlling respiration and heart action, so that the patient dies from what is ordinarily called suffocation.

The symptoms of displacement of the liver are those of extreme drowsiness, seeming or complete coma, with marked, vertebral constriction over the liver areas, with scarcely perceptible response to attempts to secure vertebral relation.

When the Chiropractor meets with symptoms of the character indicated he should always immediately investigate to see whether there has been such dis-relation of the liver as has been described.

To correct the position of the liver under such displacement, the patient should be placed upon the dorsum, with the hips upon a bed, bench, or the Relator's lap, while the shoulders and head lie upon the floor, when gentle force may be applied over the area of the liver displaced in a vibratory manner, which will soon have the effect of inducing its return to relation.

It is hardly necessary to say that such application must be made with the greatest caution, and the Chiropractor should constantly keep in mind the delicacy of liver tissue construction.

CHAPTER XV

PANCREAS—ALIMENTARY ABNORMALITY

(a) *Affirmative: Congestion—Inflammation—Inflammatory Catarrh.* (b) *Negative: Dilation—Exuding Catarrh—Dropsy.*

Like the spleen, there is much doubt indulged by the therapeutic profession as to the actual functions of the pancreas, and indeed its functions are difficult to ascertain and understand.

The pancreas is constructed to act in conjunction with the liver, and of course, its paramount office is that of aiding in digestion; yet, like the liver, it exercises remarkable constitutional influences upon the whole organism.

In proportion to the size of the organ, a very large quantity of blood is transmitted into and through the pancreas, and yet its tissues are largely of a lymphoid nature.

It will be remembered that the pancreas is a racemose, lobulated gland, and that it is rich in the production of leucocytes.

What the substance is, under normal condition, that the pancreas contributes to the general liquids of transportation is not known. It is known, however, that abnormality of the pancreas exercises a markedly important influence upon the entire organism, and that this influence comes about by a change of chemistry effected by the change of chemical formula in the consistence of the pancreas.

The fact is that all of the large glands of the body are peculiarly subject to toxic changes in the atmosphere, miasmas, emanations from the earth, etc., and that in a general sense it is of the greatest importance to understand the peculiarity of change which each of the large glands produce constitutionally, when they are adversely affected.

The pancreas, liver and spleen, all being located in a sense in the same area of the abdomen, are ramified by nerves from the same vertebral areas. That is to say from the fourth to the tenth thoracic nerve trunks, but principally the fifth, sixth and seventh thoracic trunks. Therefore, these glands are practically always abnormal at the same time.

Of course, it is possible for the tissues of the pancreas to change in a way peculiarly distinct from the tissues of the liver and spleen, but generally, so far as the liquids of transportation are concerned, these glands are abnormal at the same time, and the adverse constitutional effect is not to be charged wholly to one of these glands, but in varying degrees and ways to each of them.

In this chapter, however, constitutional phases from abnormality of the pancreas are not under discussion, except as the same are affected through the alimentary system, but this discussion is to lay the foundation for future lessons on phases of constitutional abnormality.

(a) Affirmative process functioning will first be discussed, taking up its peculiar and aggressive phases.

CONGESTION

The pancreas, like the spleen, is subject in its normal condition to become somewhat congested with blood, but

remarkably so with lymph under the gustatory emotion, and therefore, under abnormality is peculiarly subject to congestion of blood, but pronouncedly of lymph.

On account of this accommodative function, the paramount phase, under incipient abnormality, is that of marked congestion.

The symptoms indicating congestion of the pancreas are not very well marked, and not very well known, the organ being hidden so deeply beneath the viscera ventral to it, that is the stomach, transverse colon, and headward coils of the small intestine, etc.

One pronounced symptom of congestion of the pancreas is the sense of pressure on the ganglia of the solar plexus, accompanied by an indrawing of the rectus abdominus, and its relative aponeuroses at its headward aspects and a difficulty of respiration accompanied by phases of vertigo.

INFLAMMATION

Congestion of the pancreas is of course immediately followed by inflammation; the inflammatory phases being superinduced by the irritation incident to congestion, producing motor reaction, and therefore, concentration of an unusual force from a wider cortical area, resulting in increased friction, and excessive heat.

Unfortunately we are not acquainted with the unfavorable symptoms of the pancreas in inflammation, for inflammatory phases are so nearly always coincident with the same phases of the liver, that those of the pancreas are merged with the symptoms of inflammation of the liver, and are not recognized by themselves.

It is not at all unusual for inflammation of the pancreas, when paramount, to be mistaken for inflammation of the suprarenal glands and kidneys.

There is always a marked symptom which will distinguish these, if carefully remembered by the diagnostician; and it is, that in inflammation of the pancreas there is always duodenal abnormality, while if the suprarenals are involved, abnormality will be at the flexures of the large bowel, and to some extent in the jejunum and the ilium.

Duodenal colic accompanied by supercolic impactions or gaseous accumulations are usually indicative of inflammation of the pancreas.

INFLAMMATORY CATARRH

As a sequel to the congested and inflammatory condition of the pancreas there is always an inflammatory catarrh.

Under mild, inflammatory conditions this catarrh, of course, is not of marked gravity, but under more aggravated conditions it is frequently pronounced.

When the pancreas is acting under inflammatory catarrh, there is an exudation into the intestine of a thick slime, incident to the pancreatic juice, and sometimes almost wholly taking the place of the pancreatic juice, which thus completely aborts the digestive process.

The excessive slime produced in the pancreas is not all passed through the pancreatic duct, and therefore, a great deal of it is transmitted in the lymph out of the pancreas to be discharged into the blood through other channels; a considerable amount going through the

receptaculum chyli, and in this manner being distributed quite widely throughout the organism.

The marked, constitutional effect of pancreatic, inflammatory catarrh is the influence of these abnormal slimes primarily upon digestion, but incidentally upon the whole organism.

(b) Negative process functions of the pancreas under abnormality, are here to be described.

DILATION

Normal congestion of the pancreas, of course, does not meet with the pathologic meaning of dilation, because it is completely temporary, and with the passage of the distending liquids it returns to its normal size.

Dilation from the standpoint of pathology is a chronic phase in which the tissues are, by a combined process of anemia of certain cells, resulting in distension of others, accompanied by liquid congestion, so that the organ actually occupies a larger space than in the normal.

The process resulting in the condition just described must be chronic in its nature, or dilation has not been pathologically accomplished.

There is another phase of dilation, which should be discussed in this connection, and that is where the anemia of cells does not take place, but where morbid matter is accumulated, and a gross assimilation occurs, actually enlarging the tissues of the gland. This phase of dilation does not occur so frequently as the congestive phase, but it does occur under some circumstances.

Dilation being a sequel of congestion and inflammation, its symptoms need not be discussed further than to say that in dilation of the pancreas, the patient

undergoes a sensation of extreme fulness in the pancreatic area, which fullness may be detected by a careful palpation.

The diagnostician is cautioned in this palpation not to mistake the stomach in its long curvature, or the transverse colon, for dilation of the pancreas, because these structures alternate in lying ventral to it.

There is no occasion to make the mistake referred to, if the other symptoms of congestion and inflammation of the pancreas have been observed, for the effect of these symptoms will be sufficient to prevent the mistake indicated in the caution.

EXUDING CATARRH

As a concomitant to dilation of the pancreas there will be exuding catarrh, which means that the slime referred to, instead of being thick and rich in exudates, will be thin and copious.

Frequently exuding catarrh of the pancreas, in very debilitated conditions, is mistaken for intestinal tuberculosis. By examining catarrhal exudates from the intestine, it is not always possible to diagnose exudating catarrh of the pancreas, for it frequently happens that both the pancreas and intestine are acting under the same phase. However, if all of the symptoms of abnormality of the pancreas heretofore mentioned are noted, and the catarrhal exudate of the pancreatic type is found in the feces, a conclusion that the pancreas is acting under exuding catarrh will not be incorrect.

Of course, it goes without saying that when the pancreas has reached the degree of tissue abnormality, in which there is exuding catarrh, anything like

intestinal digestion, in the real sense of that word is an impossibility, and there will be marked, and grave phases of the entire intestinal tract.

DROPSY

Pancreatic dropsy occurs much more frequently than the profession supposes. When it occurs it is always a sequel to exuding catarrh, and exists when dilation of the pancreas has become so great that the liquids are not discharged from the lobuli into the incipient ducts that in their aggregation constitute the pancreatic duct, but, because of marked occlusion of stimulus to the organ, remain, distending all of its potential cavities.

Of course, there are different degrees of dropsy of the pancreas, and dropsy may occur from the slightest retention in the potential cavities, to a distension of all of the potential cavities to their utmost, and in the same manner, the organ may reach several times its normal size.

Relating to remove pancreatic, alimentary abnormality will be accomplished by restoring relation of the thoracic area from the fifth to the ninth pair of thoracic trunks, both inclusive, but particularly the seventh and eighth thoracic trunk areas.

CHAPTER XVI

GENERAL ALIMENTARY ABNORMALITY—STOMACH

Affirmative: Congestion—Inflammation—Inflammatory Catarrh—Adenoids—Pharyngitis—Quinsy—Mumps—Esophagitis—Whooping Cough—Inflammation of the Stomach—Ulcer

Alimentary abnormality is the most extensive theme relative to disease of human beings.

Ninety per cent of the human family overeat. Overeating is the direct route to alimentary abnormality.

There are some people, because of their unusual development and resistance, who can overeat, and not meet with a pathologic result, but this number is so inconsiderable that, viewed from the field of pathology, it is almost negligible.

It would be impossible in this chapter to treat of the entire pathology that is a sequence to abnormality of the alimentary organs. The purpose here is to lay the foundation for such future discussion by giving the immediate pathology of the alimentary canal.

It will be recalled that the alimentary canal begins at the lips and ends at the anal orifice. It is, therefore, incident to every phase of abnormal tissue condition and process which occurs in the human organism.

A complete discussion of the symptoms of alimentary abnormality would be a practical discussion of the symptomology of the entire organism, therefore, in this chapter no great amount of detail of symptoms will be indulged.

CONGESTION

Here, as elsewhere, congestion is the incipient phase of pathology, and occurs at any and all places where nerve stimulus is occluded.

It must be understood as a paramount proposition that when there is occlusion of stimulus in the nerves to the alimentary canal for any reason, or caused in any manner, that at the terminals of those nerves there will be congestion of the liquids of transportation, that is, blood and lymph.

The name given to such condition therapeutically has usually been stasis; a word which does not completely convey the meaning intended.

It will be understood that the word congestion, used in this connection, is meant to convey the thought that there is in the area involved more liquids, and therefore, more retained morbidity than there is in physiologic procedure.

INFLAMMATION

When nerve stimulus is occluded sufficiently to result in congestion in the affirmative phase, there is always an accumulation of combustible chemistry; the accumulation amounting to an irritant. The irritant just pointed out produces motor reaction, which superinduces the concentration of stimulus from a wider cortical area to the alimentary area involved, resulting in an increase of friction and a rise of temperature.

The situation just explained amounts to that functional process which therapeutists have designated inflammation. Of course, it will be understood that phases of congestion and inflammation may occur at

any area of the alimentary canal, to which stimulus is occluded.

INFLAMMATORY CATARRH

Incident to congestion and inflammation there always follows as a sequence inflammatory catarrh, which is an exudation from the area of the accumulated morbidity, together with the retained liquids, enhanced by increased disintegration.

The exudate from congested and inflammatory areas differs markedly in its density, depending upon the length of time the process has been operative, the gravity of occlusion of stimulus to the area, and the accumulation and tissue change incident thereto.

This phase of catarrh may last only a short time—from a few hours to a few days, or it may continue for several weeks.

The exudate from inflammatory catarrh usually discharges into the alimentary canal, and if it occurs in the headward parts thereof, that is the pharynx and esophagus, it is usually passed from the mouth as sputum.

If the exudate discharges below the cardiac orifice of the stomach it usually passes through the alimentary canal, and is eliminated at the anal exit.

However, it must be remembered that a large portion of such catarrhal exudate, and perhaps the larger portion, is distributed through the lymph areas relative to the congestion, and thus finds its way into the veins, and thence through the system, and it is in this connection that its most damaging effects occur.

ADENOIDS

The general, although possibly incorrect, use of the word adenoids to indicate congestion and inflammatory changes in the lymphoid tissues of the pharynx in that part of it designated as the tonsillar ring, is of the type of pathology just described.

Adenoids may assume any of the various forms of congestion, inflammation or inflammatory catarrh, and of course run the gamut of all these phases, if the phase of pathology continues long enough.

Congestion and inflammation of the lymphoid tissue of the tonsillar ring generally occurs in an acute manner, and with removal of occlusion subsides almost as quickly as it began.

In chronic occlusion to the tonsillar ring area, however, all this is changed, and frequently there are conditions caused by the proliferation of abnormal cells in the lymphoid tissues, until the tonsillar ring almost closes the cavity.

Sometimes these tissues become hard, and full of scar tissue, in which event it is well to have the scar tissue removed by instrumentation.

The symptoms of adenoiditis is the congestion, inflammation and enlargement of the tissues of the area. However, this situation is symptomologicly related to a constitutional adversity, which has been discussed and the relation has been pointed out.

In a very large majority of cases, by releasing occlusion to the area the congestion and inflammation of the adenoid tissue may be entirely overcome, with complete restoration thereof.

PHARYNGITIS

The word pharyngitis simply means "sore throat."

It will be seen that under this meaning any phase of tissue abnormality of the throat, accompanied with the sensation of soreness, aside from arbitrary distinctions, comes under this heading.

In a certain sense the term pharyngitis includes all kinds of sore throat.

The mucous lining of the pharynx is seldom seriously affected by itself, and of course includes the subjacent tissues, that is, the submucous tissues, including all glands, nerve ganglia, nerves, vessels, etc., which also includes all of the tissues of the tonsillar ring, the parotid glands, and so on.

It must also be kept in mind that when the tonsillar tissues of the tonsillar ring of the pharynx are involved to any extent, the subjacent tissues relative thereto will be involved proportionately.

From what has been said, it will be seen that pharyngitis presents an extensive series of adverse tissue conditions, with many phases of adverse functional process—the number of which are beyond enumeration.

However, in the incipient phases of pharyngitis the paramount symptom is occlusion of stimulus to the area, congestion at the periphery of the nerves occluded, accompanied by an accumulation of adverse chemistry.

One of the aggravations of a pharyngitic throat is abnormal use of the same in speech, song, etc., but such irritations, however, would not of themselves serve to produce this adverse phase.

QUINSY

Quinsy is an acute congestion and inflammatory phase of a chronically abnormal tissue condition of the true tonsils.

It must not be supposed that this phase of abnormality is confined to the true tonsils, for always relative tissues are involved, and not unusually all of the lymphoid tissues of the tonsillar ring.

Quinsy so-called is not a dangerous phase, but it is a very distressing condition. It is in a sense a general phase, because not only the tissues of the throat, but those of the stomach and kidneys are also involved.

In this phase the tonsils are so congested, swollen, and inflamed that frequently they protrude from the tonsillar recesses to such an extent as to almost close the isthmus of the fauces.

The tonsillar ring is frequently so swollen that the Eustachian tube and posterior nares are almost closed, and to such extent that the individual finds it difficult to breathe through the nose, and almost invariably breathes through the mouth.

The stomach condition is such that there is usually complete loss of appetite, sometimes nausea, and almost always severe headache, with pain in the eyes, and a sense of great weakness, and inability extending over the entire body, which sensation is largely induced by the condition of the kidneys.

There is also an inability to perform mental effort; the throat is dry, parched, and painful on movement.

If the phase is quite pronounced, pus frequently accumulates in the tonsil, in which event there is chill with successive fever, sometimes rising to a considerable

height. This phase of the process is never reached if the principles of Chiropractic are applied early. On account of the condition of the tonsillar ring, the breathing through the mouth is stertorous, or of a disagreeable wheezing, and in sleep there is the conduct ordinarily called snoring of a profound character.

The proper care of a patient under this process is to stop the administration of food of any kind; but he should have all the pure water he will drink. If the bowel has been sluggish, there should be administered two high enemas the first day—none afterwards, unless symptoms indicate the necessity. The patient should be kept in bed in a warm, quiet room, and should be related from two to five times daily, depending upon the gravity of the phase, the first two or three days. Afterwards once a day until recovery is sufficient.

MUMPS

This word means " closed mouth," and this phase of abnormality is particularly indicated by inflammation of one or both of the parotid glands, usually with profound swelling, which of course includes relative glandular tissue.

Mumps begin with a slight chill usually, and of course this may assume the gravity of a profound chill. The chill is followed by an elevation of temperature.

Beside the salivary glands, the organs paramountly affected, are the stomach and kidneys, and as a result there is not only prostration of digestion and alimentary conduct, but there is congestion in the head and eyes, usually accompanied by headache and the sense of soreness and pain in the muscles, and frequently in the

abdomen, because of the ramification of kidney nerves to the intestine.

In children, mumps is frequently accompanied by nausea and vomiting. This phase of abnormality has been generally classified as a child disease, but this is in no sense true. The phase occurs in persons of almost any age. However, of course, on account of the great indiscretion of children in the matter of eating, and the care of their bodies, they are very much more frequently subject to this adverse phase than adults.

Mumps only occur in children or adults in whom there is chronic occlusion of kidney nerves, which exists because of hereditary tissue conditions, or from injuries incident to the present organism.

On account of this chronic predisposition, those persons who are subjects of it, succumb to the peculiar atmospheric condition when their chemical phase of preparation has rendered them sufficiently non-resistant.

Mumps, therefore, occurs usually in epidemic phase. However, mumps also occurs sporadically. The therapeutic world has supposed that mumps is contagious. However, there is nothing to sustain such a theory, but there is much evidence to sustain the thought that mumps is the result of certain atmospheric toxins or earthy emanations, which affect people similarly who are just in the right chemical attitude.

In adults there is frequently a complication which occurs in mumps. In the woman there is congestion and inflammation of the ovaries, and congestion of either or both mammary glands; while in the male there is inflammation and congestion of the testes.

The complication just referred to occurs only in those

cases in which occlusion to kidney nerves, and therefore to the organs mentioned, is marked, and because of the same a chronic tissue condition exists in those organs.

ESOPHAGITIS

This phase is an acute congestion and inflammation of the tissues of the esophagus, peculiarly the mucous and submucous linings.

This phase of abnormality frequently occurs as incident to incipient congestion of the stomach. The symptoms are indicated by an exudation from the esophagus of a thick, ropy, viscid slime, which requires a considerable expectoration.

This phase may, and frequently does, become chronic and in that form it takes on the characteristics of an exuding catarrh, and the inflammation almost entirely subsides, and in this condition the exudate is thin, and frequently has an offensive odor.

Occasionally, in phases of this process, there is much irritation to the trachea as incident to the same occlusion, which causes much coughing, and frequently slight hemorrhages of the esophagus occur, and this is almost sure to take place if concomitantly the stomach is also in grave tissue condition.

WHOOPING COUGH

This phase of tissue abnormality is named from the characteristic cough which is its paramount symptom.

Therapeutists classify whooping cough as a " nervous disease." It is, however, a phase of alimentary tissue abnormality.

Occlusion, producing the abnormal process, is of the

fourth thoracic trunks, which ramify the esophagus, and pharynx.

Whooping cough is a sequel to esophagitis, which has just been described. It only occurs in persons, the tissue condition of whose esophagus is chronically catarrhal.

In this phase there is constriction of the headward end of the esophagus, and when the exudate from the walls of the esophagus becomes so great as to press the ventral wall thereof forward into the dorsal wall of the trachea, sufficiently disturbing the ciliary processes, a paroxysm of coughing is set up. The paroxysm must be sufficiently pronounced to force the exudate upward and out of the esophagus. In mild cases, the paroxysm only continues for a short time, when the accumulated mucous is thrown into the pharynx. But in pronounced cases the paroxysm sometimes lasts from thirty seconds to two minutes, and the agony in straining is intense, and must continue until the bolus of slime is forced out of the esophagus when the paroxysm subsides.

It sometimes happens that such a paroxysm is continued so long as to induce profound vomiting, and sometimes complete prostration of the patient even to unconsciousness.

After the accumulated slime is thrown out of the esophagus, the paroxysm entirely subsides, until the accumulation occurs again, when the whooping cough is again resorted to for its removal.

To relieve this condition, relating should be performed from four to eight times in twenty-four hours at regular intervals, for two or three days, during which time the patient should eat nothing, but should drink plenty

of water, and, if indicated, the large bowel should be entirely emptied by enema.

Relating to remove the phases of abnormality discussed in this chapter should be performed at stomach and kidney places, and the suboccipital area. That is to say, relating to free the fourth, fifth and third thoracic trunks; the twelfth, eleventh and tenth thoracic trunks, the first and second cervical trunks, and, incidentally, the headward thoracic ganglia, which lies in front of the axis, atlas and third cervical vertebrae.

Incidentally it will occasionally be necessary to release the seventh thoracic nerve trunks, since their occlusion is frequently a complication in the phases described.

INFLAMMATION OF STOMACH

Inflammation of the stomach differs in no respect from inflammation elsewhere, and, of course, includes congestion of the stomach.

When, because of occlusion of nerves of the stomach area, there is sufficiently pronounced congestion in the tissues of the stomach to produce a sufficiently pronounced motor reaction from a wide cortical area, friction will be increased to the extent of producing an inflammatory condition.

Of course, inflammation of the stomach is always acute at the incipiency, in one sense of the word, but children are frequently born with such indifferent tissue conditions of the stomach, and of such hereditary tissue habit, as to almost escape the acute phase of inflammation of the stomach entirely. In such cases the chronic tissue condition manifests itself very early in life.

Ordinarily, however, acute congestion and inflammation of the stomach is a process that continues for a considerable period of time. It can be well seen that the ordinary functions of the stomach under this phase are always lost in ratio with the tissue abnormality of the stomach. In other words, digestion is always as abnormal as the tissues involved.

Of course, it is known, without further discussion, that inflammation of the stomach will always be succeeded by catarrh of the stomach.

In the acute phase, the exudate is thick, ropy and viscid, but in the chronic phase becomes thinner and less viscid, but usually more acid or acrid, and in grave phases of catarrh of the stomach, becomes a pronounced toxin.

The paramount symptom of congestion and inflammation of the stomach is that of lack of appetite, or voracious appetite, frequently accompanied by slight general rise of temperature, and many times by headache, and with pronounced congestion of the eyeballs; coated tongue, which is dry and parched, and also a sense of a dry and parched condition of the throat.

Catarrh of the stomach will be peculiarly indicated by a tendency to spit up the food in the milder phases, and vomiting immediately after eating in the more pronounced phases.

ULCER

Ulcer of the stomach is a culmination of catarrh of that organ. It is a grave, and sometimes dangerous tissue condition.

As a result of pronounced occlusion to the stomach

in these conditions frequently disintegration has increased so extensively and assimilation has been so indifferent, or so badly prostrated, that there are complete openings in the mucous membrane, or places where mucous membrane is not formed, classified as open sores.

The marked danger incident to this condition is that sometimes failure of assimilation and increased disintegration have become so grave that there are perforations in the stomach wall, through which there is emission into the abdominal cavity, followed by peritonitis, from which the patient usually dies.

The pronounced symptoms of ulcer of the stomach are pain following eating, with nausea, and sometimes vomiting, or sometimes the necessity to spit up the food without nausea, but whether vomited or spit up, the substance may contain a mixture of blood.

The pain following taking food is usually of a burning character, and begins immediately upon taking substances into the stomach, and ceases when these substances have passed out of the stomach.

It is hardly necessary to say that in either congestion, inflammation, catarrh or tumor of the stomach, nothing approaching normal digestion can be accomplished.

In cases of ulcer of the stomach, no solid food should be administered. Indeed, no food should be administered at all, if the condition of the patient will bear its suspension. In the event that food must be administered, it should be entirely of the liquid variety, and peculiarly that kind of substance requiring the least stomach digestion, and should only be administered in small amounts so as not to distend the stomach.

Only enough water should be administered per

mouth to allay the sense of thirst. In such a situation the volume of the liquids of transportation should be kept up by normal salt solutions injected into the rectum. So far as possible the stomach tissues should be undisturbed, until they have had opportunity to heal.

Relating to remove occlusion in congestion, inflammation, catarrh and ulcer, should be primarily addressed to the fourth, fifth and third thoracic trunks and any nerve area which is reacting to the stomach centers, because of irritation or otherwise. There will frequently be found a reaction from the kidney and liver centers.

CHAPTER XVII

GENERAL ALIMENTARY ABNORMALITY

Negative: Catarrh of Pharynx—Esophagus—Stomach——Fungi—Cancer of Stomach—Dilation of Stomach—Heartburn—Gastrodynia—Indigestion.

As has been explained in the preceding chapter, the negative phase of tissue abnormality in the structures of the alimentary canal occur as a sequence to the affirmative process.

The negative phase could never occur incipiently, but can only occur, when, by the affirmative process, the chemistries involved have been changed in consistence and in formulae.

In the negative phase, the process of tissue reproduction will always be of an indifferent nature, varying all the way from slight failure of normal reproduction to complete failure to reproduce tissue.

The process now under discussion occurs as the result of profound and prolonged occlusion; the situation having passed through all of the affirmative phases, assimilation, or the reproduction of tissue affirmatively, has markedly failed, and at the same time there has been a progressive increase in ratio of disintegration, so that there is an accumulation of morbidity in potential spaces, varying all the way in consistence from a dense colloid, to the thin colloid of pronounced dropsy.

It will be seen that what tissue is constructed under such circumstances, and the tissue that still remains

intact, or partly so, must be flaccid, non-resilient, and incapable of performing normal function.

The reason such tissue can not perform normal function is that its cell elements are so negative in their cohesion as to be incapable of receiving the application of nerve force or stimulus to them in such a way as to give them capacity to express power.

It is quite generally supposed that strength is attained in some mysterious way by the assimilation of food. This is a profound mistake. Normal assimilation produces a tissue of such machinic organization that the force of life, or nerve stimulus, is applied to it in such way as to enable it to perform conduct demonstrating power, or what is ordinarily called strength. It must be remembered that this phenomenon is accomplished as the result of a purely physical and mechanical law, and in no other way.

It may be easily seen that such a mechanism as a muscle, when normally constructed, will respond in a powerful manner to the application of stimulus, but if its cells are deteriorated, as they are under the negative process, it can not respond to the application of stimulus except in proportion to its physical condition.

It will not be necessary to go into any wider or more extended study of the negative phase as affecting structures of the alimentary canal in that part of it now under discussion.

CATARRH OF PHARYNX

The negative phase of tissue condition, as applied to the pharynx, occurs as a sequence to pharyngitis, that is to say congestion and inflammation of the pharynx.

The phases of inflammatory catarrh have been discussed, and here all that is desired is to call the student's attention to that chronic phase of pharyngeal catarrh in which there is a continual discharge of an excess of liquid from the mucous lining and the subjacent tissue.

This phase of abnormality seldom occurs by itself, but usually incident to it there is the same process in the nasal meatus and nares, and also in the Eustachian tubes, so that there is a frequent discharge from the nose, backward into the naso-pharynx, and from the Eustachian tubes ventrally into the same place. These exudating slimes require one of two things; that the individual shall continually expectorate them, or swallow them.

Under our present laws, and the foolish magnification of the fallacious germ theory, it is most inconvenient to expectorate such slimes, and it is therefore the custom of a great many people, especially women, to swallow them, which is very damaging to the process of alimentation.

CATARRH OF ESOPHAGUS

Incident to the phase just discussed, it is very common, in fact is almost universal, that the esophagus is also in a chronic catarrhal state.

Following an acute inflammatory catarrh of the esophagus, the negative catarrh may express any gravity from a very excessive exudation of slime, to a condition that amounts to an actual dropsy, in which the exudate is very thin, and without the knowledge of the victim constantly seeps through the cardiac orifice into the stomach.

In the phase of this process, in which the exudate is thicker, it is called phlegm, and its accumulations superinduce a peculiar spasmodic coughing at intervals, but particularly on rising from sleep, at which times it is not unusual for the coughing to partake of the nature of the so-called whooping cough. Many patients, under this phase of affliction, upon waking from sleep are almost immediately plunged into a paroxysm of coughing, which is continued until the bolus of phlegm is thrown from the esophagus, which sometimes is not accomplished until actual vomiting occurs.

While the last phase of the process just discussed is very distressing and annoying, it is not so deleterious as the more advanced stages, in which the slime becomes so thin that it constantly seeps into the stomach, or, if the subject bends forward, or assumes a position in which gravity tends toward the head, the exudate flows into the mouth.

When this thin, exudating phase is reached, the substance discharged is acrid and bitter, and sometimes, indeed almost universally of a very pungent and unpleasant odor, and because it continually discharges into the stomach, is a pronounced irritant thereto.

CATARRH OF STOMACH

Subsequent to the inflammatory phases of catarrh of the stomach there frequently occurs a negative exudating catarrh.

The incipient phases of this process are co-extensive with dilation of the stomach, and are frequently incident to so-called heartburn.

Under negative catarrh of the stomach in the milder

phases, accumulations of the exudate frequently produce profound nausea, the peculiar symptoms of which are the suddenness with which the emotion is brought on.

The subject, acting under this phase, may rise in the morning, feeling quite well, with an appetite, but on ingesting a part of his breakfast, suddenly finds himself the subject of profound nausea. He finds that he must evacuate the contents of the stomach by the process of vomiting, and when he does so is astonished by the amount of slime that is thrown off with the food.

Such paroxysms as just described are caused by the accumulation of this slime or phlegm from the walls of the stomach over night, which, so long as it is not disturbed by taking anything into the stomach, does not irritate the terminals of nerves to any extent.

Sometimes the taking of a glass of water is sufficient to precipitate nausea and vomiting.

When one finds himself with a sense of nausea, following the taking of a couple of glasses of water upon rising in the morning, he may be assured that he is the subject of a slime catarrh of the stomach, which should indicate to him that the stomach needs complete rest, with opportunity for recuperation which can not be had while solid foods are being ingested. Therefore, the thing indicated is rest from all solid food, and irrigation by drinking plenty of good, pure, cool water.

Under the advanced phases of this condition, it is not at all surprising for quarts of a thin, dropsical mucous to accumulate in the stomach, so that any time, if the patient is laid upon his back, and the examiner places one hand behind the stomach and the other in front

of it and gently rolls the body, he can plainly hear the sloshing of the liquids in the stomach.

In normal condition, forty-five minutes after eating, and fifteen minutes after drinking water, it should be impossible to hear, by this means, any liquid in the stomach.

The most deleterious phase incident to a catarrh of the stomach amounting to dropsy, is that there is such a continual seepage into the intestine that anything approaching intestinal digestion is an impossibility, and there is always the absorption of a very adverse chemistry from the entire intestine; the situation being accompanied by a profound and continuous chronic diarrhea.

FUNGUS ACCUMULATIONS

As a phase of the negative process, fungus accumulations occur in any and all parts of the alimentary canal.

For the present, reference is only made to fungus accumulations in the pharynx, with incidental reference to the esophagus and stomach.

In the pharynx, fungus accumulations are generally confined to the tonsillar ring.

In that phase, which is referred to by therapy as adenoids, there is frequently a considerable negative tissue of the fungus type, which partakes of a rigid nature. It is sometimes referred to as scar tissue.

Where fungus growths of the adenoid type have become hard and scar-like, it is a better process to have the fungus structures removed surgically, after which, by the application of the principles of Chiropractic,

the tissue of the area can be restored to the normal.

The same character of fungi are frequently produced around the orifices of the Eustachian tubes, and in the same degree of aggravation, should likewise be removed.

Fungus growths upon the true tonsils frequently occur, and when they partake of the scar-tissue variety, that part which has assumed such consistence should be removed surgically.

It must be understood that the preceding paragraph presupposes a marked situation, for usually, even under the negative phase, such tissues will be entirely reduced by the application of the principles of Chiropractic.

Other phases of this subject will be discussed in connection with the general discussion of cancers, and abnormal growths.

CANCER OF STOMACH

This phase of tissue abnormality is of a very pronounced type, and of course, has the effect of dethroning stomach digestion. It is, therefore, a very necessary theme to be discussed in connection with general tissue effects but is not so necessary in connection with alimentary abnormality, because the only discussion necessary is the statement already made, that so long as cancer of the stomach remains, stomach digestion is an impossibility.

Cancer of the stomach will be discussed in connection with the subject of cancer generally in another part of this book.

DILATION

Dilation is a subject that must be discussed as inci-

dent to the negative phase, because nothing approaching the process of dilation occurs until the negative phase in the affirmative process is reached.

Dilation of a tube or vessel is not an enlargement of the tissues of the tube or vessel, but is an enlargement of the lumen or cavity of the tube or vessel. In dilation of a tube or vessel under the pathologic phase, there is always a thinning of the walls coincident with the distension of the tube or vessel.

The thinning of the wall of the tube or vessel is usually in ratio with the dilation of the lumen or cavity, but that is not necessarily true.

There may be, and frequently is, such accumulation in the substance of the wall of the tube or vessel as to prevent its becoming thin in ratio with its distension. However, speaking exactly, this would not defeat the proposition stated, for notwithstanding the accumulation the general rule mentioned would maintain. Yet, the student must understand that it is not laid down here that thinning of the walls of a tube or vessel must be in ratio with the distension, for that proposition is not definitely stated.

On account of the fact that the walls of the pharynx abut upon osseous and cartilaginous structures, its general dilation is not particularly noticeable. However, incidentally dilation of the walls of the pharynx is very noticeable.

The attention of the student is particularly directed in this connection to the soft palate, and to the pillars of the fauces.

The soft palate sometimes dilates so extensively that it falls down, until the uvula touches the tongue, or

structures of the oral pharynx, so as to cause much irritation.

Dilation of the pillars of the fauces frequently permits a sagging and bulging of the true tonsils, so as to interfere with the passage of food into the pharynx, and to change the voice, giving it a dull, flappy sound.

Dilation of the esophagus frequently occurs, and very extensively. This occurs as incident to the exuding catarrhal condition just described, especially that phase of it in which there is seepage of the dropsical type into the stomach and nothing further need be said of it in this connection.

DILATION OF STOMACH

It is with reference to the stomach that dilation becomes a very prominent feature of alimentary tissue abnormality.

Again this phase of process occurs as incident to that already described of the pronounced exuding catarrh of the stomach. All that need be said then, in addition to what was said in that connection, is that frequently in dilation the stomach assumes immense proportions.

Under the marked phases of dilation of the stomach, the cavity of that organ not infrequently is double in size, and is constantly subject to a profound infiltration of liquids in dropsical flow from its walls.

This is one of the most aggravated phases of alimentary tissue abnormality, for in this connection, as in cancer, it is utterly impossible to secure anything like an approach to stomach digestion.

There are a great number of symptoms indicating this condition. The only ones necessary to refer to, how-

ever, are enlargement of the stomach, which is detected by palpation, and the discovery of a continual accumulation of liquid in the stomach by the gentle rolling process already indicated.

HEARTBURN

The stomach, being separated from the heart only by the thickness of the diaphragm, and the fundus extending up into the left cupola to a higher level than the lowest part of the heart, accounts for the name of this phase. So-called heartburn is a symptom arising from an incipient catarrhal condition of the stomach, in which, after the ingestion of certain bad combinations of food, gas accumulates in the stomach, and presses the fundus very tightly against the diaphragm at the left and behind the heart, producing a sense of pain, which has been called heartburn.

In a graver phase of the same process, there is an excessive liquid produced of a bitter or sour nature, which is frequently eructed into the mouth, increasing the unpleasantness of the situation.

The symptoms of heartburn are frequently superinduced by drinking any liquids, but specifically water, too soon after having eaten solids. Following a meal no liquids should be taken for two and a half hours. Drinking within that period, in those whose tissue condition is prepared for it, frequently produces so-called heartburn.

The symptom called heartburn is notice to the individual that he has overdone his alimentary tissue, and is a signal that rest is required.

GASTRODYNIA

Gastrodynia is the name given to a symptomologic process incident to the catarrhal tissue process. It occurs as an early phase of dyspepsia.

Gastrodynia may occur in subacute form any time in the history of the individual, if a bad combination of foods have been ingested of exactly the right chemical type. The situation in such instances is that phase frequently referred to as stomach or belly-ache.

This situation occurs most frequently in children, and especially infants at the breast, and is usually an indication that the mother's milk is too rich, or is too copious.

When a mother finds her baby suffering from gastrodynia, or what is ordinarily called baby colic, she may be sure that she either gives it too much milk, or that there is something wrong with the chemistry of her milk, or that she nurses it too often.

As an incipient phase, or as a phase of dyspepsia, gastrodynia is a very uncomfortable and aggravating symptom.

However, gastrodynia is a symptom which tells the subject of it plainer than words that he has arrived at the place where he must exercise unusual care and self-control in the matter of eating.

Incipient gastrodynia will disappear upon the adoption of proper and correct diet, but in its more aggravated form it necessitates a correction of the relation of distorted parts, which is accomplished by the application of the principles of Chiropractic.

INDIGESTION

Stomach indigestion is the functional result which

must of necessity flow from extensive abnormality of the tissues of the wall of the stomach, which have been to a large extent discussed in this chapter.

In this connection the student's attention is called to the fact that in congestion, inflammation, catarrh, dilation or dropsy of the stomach, it is utterly impossible that anything like digestion within the stomach can take place.

Indigestion, then, goes primarily to a consideration of all of these phases of tissue abnormality, and the gravity of stomach indigestion will always be of the type and character, and will be in ratio with the gravity of stomach tissue abnormality.

Attention has already been called to the fact that any phase of tissue abnormality of the pharynx and esophagus, which results in an excessive slime or catarrhal discharge into the stomach, necessarily produces indigestion.

In this connection the student's attention is also called to the fact that when there is tissue abnormality of the intestine, so that there is gurgitation of substances into the stomach, or eruction of gases from the intestine into the stomach, stomach indigestion must occur.

The student will, of course, have it well in mind that indigestion is a comparative term, and that when the word is used it is not always meant that there has been complete failure of digestion, but it is always intended to convey the sense that digestion has been interfered with, and because of the interference has not been performed normally.

To put the proposition in another light, when stomach digestion is not what it should be, it is not normal, and

presents a changed chemical formula from that of normal digestion.

Of course, indigestion may result in any change of chemistry from the slightest divergence from the normal, to the most marked change, with the concomitant effect of very slight abnormal, chemical reaction to the most profound.

In the light of what has just been said, the student will observe that stomach indigestion always results in the production of a toxin, which may be so mild that its effect goes unobserved, or may be so virulent as to very soon stop vital functioning.

The symptoms of stomach indigestion are so numerous and varied as to be beyond the possibility of description or statement.

The paramount symptom, however, is found in the fact that following the taking of food there is lack of rest, uneasiness, or positive agony.

The symptoms just referred to are expressed in a multitude of ways, but are generally accompanied by a sense of weakness or prostration of the stomach; rifting gas accumulation, spitting up bitter watery substances, heartburn, headache, pain in the eyes, languor, a sense of prostration and many other phases of like character.

Those who are in the habit of excessive ingestion frequently experience the symptoms of what they call a profound sense of hunger. Any one, eating with any degree of regularity, who finds himself experiencing a sense of hunger, may at once know that he is the subject of stomach indigestion; what he calls hunger being produced by gaseous or toxic irritations within the stomach.

In addition to the symptoms already enumerated, the Chiropractor will always observe distortion at the stomach area generally accompanied by a constriction and fixation, in all acute stomach phases.

In old, chronic phases there are distortions with flaccidity and muscular and ligamentous distension, etc.

There is another form of indigestion which should be discussed with the whole alimentary canal in mind, and that will be taken up under the title of dyspepsia.

Relating in all of the phases of abnormality discussed in this chapter, is primarily at the stomach area of the vertebral column, and particularly the release of the fourth and third thoracic nerve trunks.

In addition to these, in affection of the pharynx, it will generally be necessary to release the nerve trunks of the headward cervical area, but peculiarly the thoracic ganglia that lie ventral to the axis, atlas and third cervical.

In phases affecting the esophagus, release all nerve trunks in the feetward cervical areas, particularly the trunks such as the phrenic and the seventh and eighth cervical trunks; incidentally the thoracic ganglia that lie ventral to the seventh cervical and first thoracic vertebrae, and occasionally the middle ganglia which lie ventral to the fifth and sixth cervical vertebrae.

In connection with the stomach, it sometimes happens that address must also be made to the liver area of the vertebral column, especially the sixth, and seventh thoracic trunks, and sometimes because of eructions of gases from the small intestine into the stomach, and motor reaction to the kidney area, it will be necessary to release the nerves from the kidney region of the vertebral column, particularly the eleventh and twelfth thoracic.

CHAPTER XVIII

INTESTINAL ABNORMALITY

Affirmative: Congestion—Inflammation—Constriction—Catarrh—Tumor—Colic—Constipation—Hemorrhoids—Peritonitis.

The intestine extends from the pyloric orifice of the stomach to the orifice of the anal canal.

It will be observed that this extension is from a point very near the diaphragm throughout the entire length of the abdomen, and through the floor of the pelvis.

Attention must be called to the fact that the first division of the small intestine, the duodenum, performs in its extent almost a complete circle, ending almost on a level with its beginning.

Its terminus, therefore, is ramified by nerves from the same trunk which ramify its beginning. It must also be noticed that its colic part is ramified by nerves from the same trunks which ramify its terminal ascending part; while its infracolic and transverse parts are both ramified by nerves from the same trunk.

In connection with the facts just stated, it must be remembered that the transverse colon, and the immediately related parts of the duodenum, are ramified by nerves from the same trunk.

The jejunum, being a remarkably convoluted tube, zigzags backward and forward through the series of nerves from ramifying trunks, so that an area of the intestine may be principally ramified by a trunk, and

the termination of a convolution several feet further on in the gut will also be ramified by nerves from the same trunk.

In connection with the facts just stated, it must be kept in mind that nerves from the trunks which ramify the splenic flexure, also ramify the central area of the jejunum, and that nerves from the trunks which ramify the middle portion of the transverse colon also ramify the headward convolutions of the jejunum.

It will be recalled that the jejunum extends over the brim somewhat into the true pelvis; the convolutions in that area being particularly ramified by nerves from the lumbar trunks on that side. But, in connection with this, it must be remembered that nerves from the same trunks ramify the descending colon and the sigmoid flexure, and incidentally portions of the sigmoid loop.

The ileum begins its convolutions from the end of the jejunum in the pelvis, and by a series of zigzag and irregular convolutions, extends headward in the abdomen into relation with the hepatic flexure of the colon. It will, therefore, be seen that in a general way the terminus of the jejunum, and the beginning of the ileum are ramified by nerves from the same trunks, and that the beginning of the ileum is ramified particularly by the lumbar trunks of the right side, and that nerves from the same trunks also ramify the cecum and beginning of the ascending colon.

The middle convolutions of the ileum are particularly ramified by nerves from the second and first lumbar, and the twelfth and eleventh thoracic trunks; while the ascending colon and hepatic flexure are ramified by nerves from the same trunks progressively.

The headward convolutions of the ileum are ramified by nerves from the tenth, ninth, eighth and seventh thoracic trunks, as are also the colon from the hepatic flexure across to its middle aspect.

The student will observe that on account of the complexity of the ramification just indicated, the discussion of tissue abnormality of the intestine is very difficult and involved; the complexity of the whole theme being increased by the fact that nerves from the trunks which supply several different portions of the alimentary canal, also supply other viscera classified as vital organs.

For instance, nerves from the same trunks that ramify the ascending colon, the middle portion of the ileum and jejunum, also ramify the kidneys and in the female the ovaries, and in the male the seminal vesicles and prostate gland.

Nerves from the same trunk which ramify the spleen, liver and pancreas also ramify the transverse colon, and headward convolutions of the jejunum and ileum, and also the receptaculum chyli, thoracic duct, and the corresponding areas of the abdominal aorta, and ascending vena cava, etc.

The student will see from the foregoing paragraph that no outline in advance, except of the most general nature, can be given as to specific effects, until he knows what particular area of the intestine is referred to, in order that he may know what nerves ramify therein. And it must be remembered that, as a matter of diagnosis, it is frequently necessary to go from vertebral occlusion to peripheral symptom in order to determine the affected area, for frequently there is an unusual

arrangement both of convolution and ramification, which takes the subject out of the ordinary.

The suggestions here made are for the purpose of preparing the student for a very careful and comprehensive study of the convolutional ramification and reramification of the nerves of the intestine. That is to say, to prepare him to understand how the intestine extends out of an area of trunk ramification into the area of other trunk ramification, and then back again into the original trunk ramification, and these suggestions should be sufficient to put him upon his guard.

CONGESTION

Congestion of the tissues of the walls of the intestine is not in any definite sense different than that of the wall of the stomach. It is in fact the same thing, and occurs because of occlusion of stimulus in the same way.

Some little discussion should be made of incidental symptoms, but these can be better made under the next sub-title.

INFLAMMATION

Inflammation of the tissues of the wall of the intestine is precisely identical, so far as its pathologic effects are concerned, with inflammation of the stomach.

However, symptomologicly, there are some differences between congestion and inflammation of the intestine in the same phase of conduct in the stomach. Yet, it must be understood that these are very slight, for such phases of abnormality have a marked and definite influence the whole length of the alimentary canal.

Congestion and inflammation of the duodenum must

be very carefully observed, if they are to be distinguished from the same phases of abnormality of the wall of the stomach.

The controlling symptom of differentiation to the Chiropractor is that, if the stomach is undergoing congestion and inflammation, constriction and occlusion will be most profound over the area of the fourth and third thoracic nerve trunks, whereas in congestion and inflammation of the intestine the marked area of constriction and occlusion is over the fourth and fifth thoracic nerve trunks.

In the stomach phases, symptoms of the effects of occlusion will be more pronounced in the eyeballs, than when the congestion and inflammation is in the duodenum, in which event there will be greater congestion in the frontal parts of the brain, and in the temporal region.

Incident to congestion and inflammation of the duodenum, there frequently appears the supracolic, duodenal colic, sometimes accompanied with infracolic, duodenal colic. More frequently these phases of duodenal colic occur separately.

In congestion and inflammation of the wall of the jejunum, the most profound symptoms occur in impaction in some of the coils of the jejunum, and the same thing is true of the ileum.

The symptoms indicating impactions in these portions of the intestine are usually pain centering to the area. However, on account of the unusual and peculiar ramification which has been suggested, the pain frequently does not occur in the area, but occurs elsewhere, and the diagnostician will only be able to localize

it by understanding the complexity of nerve ramification.

CONSTRICTION

Under occlusion of nerve stimulus to the intestine, one of the paramount symptoms in the affirmative phase is that of constriction of the muscular wall of the intestine, and the remarkable part of it is that both sets of muscles frequently constrict.

In such a situation the student will see that the gut will not only be shortened, but that its lumen will be greatly lessened.

Frequently constriction and fixation of the circular muscular layer results in the lumen being reduced to such an extent as to produce complete impaction, or what might better be called strangulation.

It will be found that in supracolic, duodenal colic, the situation is brought on by constriction of both the colon and duodenum, where they transect.

The infracolic, duodenal colic, is caused not only by constriction of the muscular walls of the duodenum, but of the root of the mesentery.

Frequently interference with the passage of the intestinal contents occurs at the duodeno-jejunal flexure, because of the constriction of the root of the mesentery in its relation with the mesentery of the jejunum.

Constriction is the paramount pathologic function that produces impaction or strangulation in the convolutions of the jejunum, and also the ileum, and this same statement applies to the large intestine with the peritoneal coverings.

Constriction of the walls of the rectum is one of the

pronounced phases in rectal pathology, but it is in connection with the anal canal that these constrictions are most profoundly impressed, because here is the aggregation of circular fibers that compose the anal sphincters, which are accessorily reinforced by the sphincterly arranged fibers of the muscles of the pelvic outlet.

It appears without saying it, that the paramount office of the Chiropractor is to release occlusion in the nerves ramifying the areas of constriction, and to follow that correction by securing relation in constricted areas.

The subject of constriction in the walls of the intestine has been more fully considered in the chapter on Orificial Abnormality.

CATARRH

Incident to congestion and inflammation of the intestine, the usual and ordinary inflammatory catarrh occurs.

This phase of catarrh is but the depuration of accumulated morbidity incident to the failure of assimilation and the increased disintegration, which have been phases of pathology up to this time. Catarrh of the intestine in the phase under discussion is an office necessary to recovery, and will always take place in the restoration of normal chemistry.

There are a multitude of symptoms indicating this phase of catarrh in the intestine, and they are so completely a part of the symptoms of congestion and inflammation as to be incapable of separate statement. The only well-defined and positive symptom of catarrh of the intestine is the observance of mucous excretion in the feces.

TUMOR

Incident to the catarrhal phase of depuration, sometimes tumors are produced in the wall of the intestine.

Tumors in the intestine following catarrh simply indicate that assimilation has been profoundly interfered with, and that disintegration has been greatly increased, both of which indicate a very profound occlusion of nerve stimulus to the area.

Tumors of the character mentioned are usually indicated by a burning sense localized in the intestine. Usually, however, tumors of the intestine are not observed by the patient. They may sometimes be indicated by soreness upon pressure of the intestine, but this can not be relied upon as a symptom, for congestion and constriction of the mesentery will frequently produce the same sensation.

Of course either catarrh or tumor is indicative of grave vertebral occlusion of nerve stimulus, and should immediately have attention, and the release should be vertebral and local, as indicated by centralized constriction, for in the affirmative phase there will always be centralized constriction in either catarrh or tumor.

COLIC

Intestinal colic is an adverse process which indicates that any or all of the phases just discussed are true of the intestine; in other words, actually may occur in connection with practically any other phase of intestinal abnormality.

Colic is usually a symptomatic effect of an accumulation of gas in the intestine. It may, however, be from an accumulation of the contents of the intestine in a

solid bolus, or of something in the form of a solid mass in the intestine.

Many times a profound colic occurs incident to aggregation of substances on the intestinal wall, during phases of inflammation.

Intestinal colic is usually considered under three heads: (1) flatulent, (2) bilious, (3) lead.

Flatulent colic is incident to the accumulation of gases in the intestine.

Bilious colic is induced by discharges of abnormal bile into the intestine. This may result in flatulent colic, but is usually indicated by congestion and inflammation.

Lead colic belongs to the negative phase, and will be discussed in that connection.

CONSTIPATION

The word constipation means impaction, or that a substance is pressed together more closely than usual. To lengthen the word out, it really means con-stop-ation or " a stopping together."

Therapeutists have usually assigned the word constipation to rectal abnormality, or the inability to pass feces from the rectum. There really is nothing to so confine the meaning of this word.

The substances in the jejunum and ileum are properly called chyle. That in the large intestine is called feces. The truth, of course, as usual, lies in the golden mean. The chyme comes from the stomach in liquid, or quasi-liquid form, and constantly increases in density. Its liquid parts are absorbed throughout the entire small intestine, but peculiarly throughout the jejunum and ileum.

The contents of the intestine may constipate at any area to which there is pronounced occlusion, causing any of the affirmative phases—inflammation, constriction, catarrh, tumor, etc.

It will be seen that in such areas impacting may result from (1) constriction of the lumen of the tube; (2) accretion, or a sticking of the substance, to the walls, when they are in an inflamed condition; (3) by constriction of the mesentery around the intestine, preventing its movement and therefore, the movement of its contents; (4) by constriction of one area of the intestine, and dilation of an immediate area, resulting in the production of a bolus in the dilated area, which becomes too dense to pass through the constricted area.

The suggestion just given more particularly applies to the small intestine, but also applies to the large intestine, and particularly to the hepatic, splenic, and sigmoid flexures thereof.

There is seldom any phase of these impactions in the sigmoid loop, but they are peculiarly frequent in the ampulla of the rectum. For here frequently it occurs that the sphincters ani are constricted, while the ampulla is dilated, in which event a bolus of feces accumulates so large and solid that it cannot be induced to pass through the sphincters ani. Sometimes, in the situation last indicated, it is necessary to go into the rectum per ani, and forcibly break up the bolus.

In the other parts of the intestine mentioned, it is frequently the proper method to apply force judicially in the right direction of the gut to pass these solid accumulations on, and it sometimes requires prolonged and patient effort to do so.

The symptoms of constipation are the localization of such impactions in the small intestine, and the large intestine, with the exception of the rectum. Of course, rectal constipation is paramountly declared by failure of evacuation of feces.

Constipation of any gravity, however, is symptomologicly expressed by irritation and motor reaction of the nerve trunk extensions, and by motor reactive process through the visceral system, constricting areas, peculiarly those of the kidney, liver, stomach and cerebral areas, such as the frontal brain, the eyeballs and areas ramified by the olfactory nerves.

Congestion and hardness of the eyeballs are sometimes indicative of constipation, but not necessarily declaring it, and inflammatory catarrh of the nasal meatus and the nasal antrums also indicate constipation, peculiarly rectal constipation.

HEMORRHOIDS

In a general way hemorrhoids have been discussed in connection with orificial correction, and will be only incidentally discussed here.

Hemorrhoids is a phase of pathology which occurs subsequent or concomitant with constipation. The pathology of this phase of abnormality usually occurs relative to the place where true mucous membrane is transmuted into the muco-skin; that is, where the mucous membrane changes its character as it approaches the orifice of the body. Therefore, within the anal canal.

It will be recalled that the arterioles which carry blood to the mucous lining of the rectum extend through

the muscle wall of the gut to form in sub-mucous tissue what is called the hemorrhoidal plexus, and that hemorrhoidal veins carry the blood away through the muscular walls of the intestine again, and lymph is also carried in the lymph vessels through the muscle walls from the intercellular spaces around the blood capillaries.

Occlusion of stimulus in the nerves ramifying the muscles of the walls of the rectum, and the vessels just named, results in the affirmative phase, in the muscles becoming constricted with abnormal fixation, preventing the passage of blood in the hemorrhoidal veins back from the mucous lining.

In the areas where this occurs there first will be congestion with inflammation, and the formation of little blood tumors, which continue to increase in size in ratio with the intensified occlusion.

These blood tumors are called hemorrhoids, and they may, and frequently do, occur two and three layers deep from the surface.

It sometimes happens that occlusion of the character named is so intense that cohesion in the submucous structures is so completely lost that the mucous membrane separates from the muscular wall of the gut, and in the effort of defecation protrudes from the anus. Such a situation is usually called protruding piles.

Therapeutically, the symptoms of hemorrhoids are the pathologic growth itself. However, Chiropracticly, there are a multitude of symptoms indicating hemorrhoids.

In hemorrhoids there is nearly always congestion in the head, and especially the frontal brain and eyeballs. There are continuous constrictions of the muscles and

ligaments at the base of the skull, with profound fixation and constriction of the muscles of the middle and base of the neck, particularly centering with greatest gravity at the fifth cervical. There is usually a center of constriction at either the liver or stomach area, or both. This is most pronounced at the liver area, unless distortion at the stomach area is pronounced and of long standing.

Of course, the last statements make it clear that abnormality of the liver is always concomitant with hemorrhoids, and that generally there is the complication of duodenal and stomach abnormality, not infrequently involving the other large digestive glands with frontal brain and eye abnormality, and sometimes nasal and Eustachian inflammation, catarrh, etc.

For a further discussion of this subject see "hemorrhoids" in the orificial department of this work.

PERITONITIS

Peritonitis is conceived to be an inflammation of the lining membrane of the abdomen, or an inflammation of that membrane where it invests or sustains relation to the abdominal viscera.

It will be sufficient in this connection to say that *per se*, no such phase of abnormality occurs. Of course, there will be congestion, inflammation, catarrh and all other phases of both the affirmative and negative process occurring in the peritoneal membrane, but it must always be remembered that these phases involve the peritoneal membrane, the subserous tissue and the subjacent tissues.

If the discussion is directed to the parietes, then, of

course, tissues of the abdominal wall are involved, but if the thought is turned to the peritoneal structures which relate to the abdominal viscera, then of course consideration is given to the various mesenteries; the root of the mesentery, greater or lesser omenta, etc.

In any ordinary case of peritonitis, the first object of the Chiropractor is to locate the affected area, and next to free the nerves to that area; not only at their point of emergence from the vertebral column, but at other places where they may be interfered with.

Usually application of the principles of Chiropractic in this way, with complete suspension of diet, will be efficacious in removing the difficulty. It sometimes happens, however, that where the gas is very pronounced, and there is much accumulation of toxic morbidity, abdominal drainage with irrigation becomes necessary. Of course, when this occurs the case has become instrumentally surgical, and the Chiropractor should call to his aid a surgeon who understands the modern method of abdominal drainage and irrigation.

Incident to the surgeon's efforts, the Chiropractor must see to it that occlusion is kept down to the brain, respiratory organs, and the heart. This can be done, without disturbing the patient, in the sitting position, which is the one recommended for abdominal irrigation.

Incident to congestion and inflammation and inflammatory catarrh of the intestine, sometimes in connection with exuding catarrh, constipation occurs. For generations it has been the custom of the medical world to administer cathartics to remove constipation. There is no more damaging and uncalled for procedure in all of the folderols of therapy than the administration

of cathartics, with the hope of removing constipation.

A cathartic is a paralyzer. It paralyzes the periphery of nerves to the folds of the intestine, which has the effect of temporarily producing a diarrhea. That is, it interferes with the absorption from the intestine, leaving an excess liquidity in it, and precipitates an excess discharge from the mucous glands of the intestinal walls. This serves to accomplish the purpose of floating the solid contents out of the bowel, but it also serves to produce an inflammatory condition in the tissues of the wall of the bowel, which must have the effect of intensifying the constipation.

There is no more certain way to produce chronic constipation than to habitually administer cathartics, or foods that are known to have the effect upon the particular patient of moving the bowel, for foods that act upon a person in such a way as to move his bowels in liquid form, is to that organism a cathartic.

Relating to remove occlusion of stimulus in the various phases just discussed reverts to the Chiropractor's sound judgment, and profound anatomic sense. Only the the most cursory rules can be stated.

In a general way, then, in phases of abnormality affecting the duodenum above the colon, release of the fourth and fifth thoracic nerve trunk areas will be indicated. If the phase is infracolic, then it will be the release of the sixth, seventh, and sometimes eighth thoracic trunk areas that will be necessary.

If the area of trouble is in the transverse colon, or headward aspects of the jejunum or ileum, the areas from the seventh to the ninth thoracic trunks will be the places to release.

If the areas of trouble are the hepatic and splenic flexures, and the related convolutions of the ileum and jejunum, then from the ninth to the eleventh thoracic areas will be the areas of attention.

If the area of trouble is in the ascending or descending colon and the middle convolutions of the jejunum and ileum, then the ninth, tenth and eleventh thoracic areas must be carefully investigated.

If the center of the trouble is at the sigmoid flexure, cecum, appendix, or feetward aspects of the jejunum and ileum, then the twelfth thoracic, and first and second lumbar areas are the points of attention.

If the trouble is located in the sigmoid loop or rectum, the third, fourth and fifth lumbar areas are indicated, as well as attention to the ileum and sacroiliac relationships.

It must be explained that the statements made above are only intended to give the student a specific hint as to the area. The exact place of occlusion must in each case be left to his diagnostic ability, for because of the complexity of the intestine in its convolutions, it is utterly impossible to state with exactitude the place of occlusion. The only way in which the exact place of occlusion could be stated, would be by first knowing the exact area of the trouble.

In the extremely long intestinal tube, making as it does three almost complete circles, the only way to arrive at a positive statement as to the place of occlusion would be to first determine the exact area of trouble, and then it would be possible to state where the exact occlusion would be.

However, the practitioner need have no trouble here,

because the trained palpator will have no difficulty in locating the area of trouble, and therefore, the area of occlusion. Or, having located the area of occlusion, will have no trouble in knowing the area involved.

What has been said here, with respect to intestinal areas, will apply in the manner stated to areas of peritonitis.

CHAPTER XIX

INTESTINAL ABNORMALITY

Negative: Dilation—Exuding Catarrh—Lead Colic—Diarrhea—Tumor—Flux and Dysentery

The negative phase of intestinal abnormality occurs as a sequence to the affirmative phases discussed in the preceding chapter.

In every phase of this discussion, then, the student must have it well in mind that at least the affirmative phases of congestion, inflammation and catarrh have passed before the phase here to be discussed becomes apparent.

It would be impossible to describe the very great number and complexity of symptoms that arise as incident to the negative process of intestinal abnormality.

The student must understand that occlusion, which caused the affirmative phases, is continued in the same, or in an increased gravity; the rule being that there is an increased gravity of occlusion, because of the continually widening area affected, in which event there would be the confusion of affirmative phases, which would tend to obscure that under discussion.

Of course, it is clear to the student that there will be under such a situation as outlined, a continually decreasing assimilation, and in that which is accomplished a progressively lessened cohesion, accompanied by disintegration, which will increase in the ratio of intensifying occlusion, and inferior assimilation.

In the situation outlined, absorption is materially interfered with, and very greatly lessened, while at the same time excretion from the mucous glands from the wall of the intestine will be proportionately increased.

It will be seen that in the condition just stated, much liquid that should be absorbed from the intestine will remain in it, and that a very great excess of liquid will be discharged from the mucous glands into the intestine. It will be understood that the discharge into the intestine from the mucous glands will sometimes amount to a dropsy, and may be in any abnormal amount, from the slightest excess to the most profound dropsy.

Of course, it will be also understood that in the profoundest exudating conditions, there will be pockets, as it were, of accumulated liquid, or profound liquid discharge from the intestine.

DILATION

There could not be the pockets in the intestine just referred to if it were not for the fact that the phase of pathology called dilation of the walls of the intestine had occurred.

Dilation in the sense under discussion may be the result from an actual pathologic change in the wall of the intestine, or it may be merely the result of a flaccidity, and therefore, fully distended condition of the intestine.

The flaccidity and distended condition just referred to is the situation found in the more acute type, but usually in dilation of the intestine there has been a profound change in the tissues, so that the potential

interspaces are enlarged, and filled with negative liquid, while there is an actual decrease in the substance of the walls of the intestine. Dilation here in no sense differs from dilation in the walls of the stomach, or in any other of the vessels or tubes of the body.

The location of such a dilation in the intestine as here described is proclaimed by a sense of heaviness in the area on the part of the patient, and can usually be located by abdominal palpation.

EXUDING CATARRH

This phase of abnormality occurs in the intestine immediately subsequent to acute phases, and is usually concomitant with slight dilation of the intestinal wall.

During the phase of exuding catarrh one of the profoundest symptoms usually is that of alternate diarrhea and constipation.

This phase may be indicated by a continual excess liquidity of the phases not within the scope of what is ordinarily called diarrhea.

LEAD COLIC

In connection with the phase of intestinal abnormality, in which there is slight dilation of the intestine with exuding catarrh, there frequently occurs that phase of abnormality called lead colic. This, of course, only occurs to those who are frequently and for long periods exposed to the gases emanating from lead that is used in the mixing of paint.

The person addicted to lead poisoning, should avoid such gaseous emanations, and should realize that he is in a condition requiring careful attention.

DIARRHEA

This word, literally translated, means "to flow." Therapeutically, therefore, diarrhea is referred to as looseness of the bowels of such gravity as to result in a flow of the feces.

Chiropracticly, however, diarrhea is proof that the walls of the bowel have passed through the phases of congestion, inflammation, inflammatory catarrh, and at least to the phase of exuding catarrh. In such situation as has just been stated there may be diarrhea alternating with constipation.

Following the exuding catarrhal period, if the gravity is increased, there is the dropsical period, which is true diarrhea.

Of course, true diarrhea is always what the therapeutists refer to as chronic diarrhea, and ranges all the way in its phases to the most destructive condition; for it must be understood that in diarrhea it is not only impossible to nourish the body, because of inabilty to absorb nutrition, but the process may be so aggravated that there is no absorption at all, and that the absorbents may become tubes through which the lymph returns into the intestine, thus subtracting itself from the volume of the liquids of transportation, and may materially lessen the volume of blood; indeed, may reduce the volume of blood to such extent that vital function cannot be carried on.

The situation just outlined is what occurs in that phase of abnormality called Asiatic Cholera, or Bubonic Plague.

Diarrhea of an abortive nature occurs as incident to impaction in the intestine.

What is meant by abortive diarrhea is that, while there is almost a continual disposition to move the bowel, very little substance passes, and that is usually of a foamy, watery nature, and of course, is only the excess exudation of mucous in the remainder of the bowel beyond the point of impaction, discharging from the intestine.

The doctor should know, when he observes the symptoms of diarrhea with little or no passage from the bowel (that of the character just described) that there is impaction or intussusception, which must in either event be very quickly removed. If the difficulty is resulting from impaction, of course the thing to do is to locate the impaction, and by direct application break it up, and pass the contents on in the intestine, incident of course to releasing the nerves to that area. If it is intussusception, which means that there is a constricted area of the bowel in conjunction with a dilated area, and that the dilated area has swallowed up, as it were, the constricted area; or may have twisted about the constricted area so as to have obstructed the lumen of the bowel, the condition must be removed.

In this situation, of course, the Chiropractor must immediately draw apart the intussuscepted areas, or unwind the bowel, if that is the situation. Otherwise, toxins will be diffused and exosmosed through the gut, producing local and sometimes general peritonitis.

If impaction in the process under discussion is in the colon, it can easily be removed by resort to direct application through the abdominal wall, assisted by enema to wash away the debris.

Of course, if the difficulty occurs in the small intestine,

enema will be of no assistance, but it is usually not difficult to remove impactions or intussusceptions if the case has early attention. Sometimes, of course, where the case comes to the Chiropractor very late, and real peritonitis has already begun, it is very difficult and sometimes impossible without instrumental assistance, in which event the case becomes surgical, and should have immediate attention, and even then the result is doubtful.

In prolonged, chronic diarrhea, such copious disintegration and discharge from the mucous lining of the bowel sometimes occurs with the feces containing great quantities of mucous. This situation is generally referred to by therapeutists as tuberculosis of the bowels.

In such a situation the Chiropractor will find it necessary to apply force to the bowels in such a way as to remove the mucous from them in connection with release of nerves to the area, for if he does not attend to securing this removal, the peristaltic effort of the bowel is so reduced that the mucous will accumulate and entirely check such operation, in which event it undergoes rapid toxification, and becomes a center of profound irritation of an affirmative type, which tends in a general way to aggravate the entire process.

In removing diarrhea, or any other phase of intestinal abnormality, the student must remember that before health is reached, the intestinal tissues must go back through all the phases and types, step by step, until normal tissue has been restored.

In connection with the statement last made, in case of chronic diarrhea the intestinal structures will go

back to the exuding catarrhal stage, the alternating inflammation and diarrhea stage, then to the inflammatory catarrhal stage, constipation stage, inflammatory and congested stage, and then to normal structures.

It is always well to have the patient understand at the outset that these are the steps and phases through which he will react to recovery, and it is suggested that in such a case it would be advisable to just hand the patient a written detail of his reaction, so that he would not be surprised when the phases present themselves, and would always have with him the written suggestion that he is recovering.

Since in both constipation and diarrhea, it has been suggested that it is occasionally necessary to use the enema, it is here carefully advised that enema is really a last emergency. It is to be used only as a crutch to our degeneracy, and therefore should be resorted to only when the symptoms absolutely indicate its necessity. That is, when there is a toxic condition which must be got rid of quickly, and there is no time nor opportunity to remove it in any other way, except by washing it away, then the resort to the enema is right, and should be instantly used, but under no other circumstances and for no other purpose.

The statement in the last paragraph is made because it is a law that no function of any organ of the body should ever be performed artificially except in gravest emergency, because to perform the office artificially is to cause the organ to cease functioning.

For instance, the moistening of food in the mouth by taking liquids, instead of chewing until normal salivation occurs, is to cause the salivary glands to

become inactive, and fixes a pernicious habit, which will directly produce indigestion and finally dyspepsia.

TUMOR

Tumor of the wall of the bowel may occur concomitant with exuding catarrh or diarrhea.

Tumors occurring in the wall of the bowel, are the same as tumors that occur elsewhere, and for the same reason.

The symptoms of a tumor in the bowel may be that of a sense of soreness at the area, which the patient feels continuously, or it may be indicated by a spasmodic soreness, or may only feel sore upon pressure, but none of the symptoms are invulnerable. Tumors of the intestine may exist without any of the symptoms indicated.

Usually, however, in tumor of the bowel there will be an excited phase of some of the functional operations. Many times tumors slough off, and debris from them may be observed in the feces in the form of pus and scraps, and sometimes in the form of clotted blood, for frequently slight hemorrhage occurs.

Of course, sometimes tumors of the bowels become very extensive, and there have been cases in which the entire wall of the bowel has been perforated by tumors. Of course, in such grave conditions pronounced prostration, and sometimes of pus formation will be pronounced. That is, there will be chill, rise of temperature, prostration of peristalsis, accompanied by general constitutional symptoms of headache, nausea, vertigo, etc. But these are not symptoms definitely indicating this process, for they occur in connection with so many other phases.

In such aggravated phases as that just discussed, frequently exosmosis of toxins occurs, and there is local and general peritonitis, in which the case may become surgical, and if it does must immediately have that character of attention.

FLUX AND DYSENTERY

Flux is but a peculiar phase of diarrhea, and all that need be said in connection with it, as a special phase of abnormality, that it occurs as incident to tumorous conditions of the bowel. It also occurs where there is such remarkable distension, because of grave occlusion, resulting in great reduction of assimilation, that an actual capillary hemorrhage of the bowel occurs.

Of course, it goes without saying that flux is always an indication of a grave tissue condition of the bowel. Flux occurs as incident to pronounced inflammation and inflammatory catarrh of the bowel, and occurs as incident to long-continued, chronic diarrhea.

The acute phase as outlined, occurs with great frequency in children, especially where children are permitted to eat gluttonously and inadvised chemistries, and especially to continually eat concentrated sweets.

Dysentery is a peculiar diarrhea that exists from eating a peculiar form of dried foods. In dysentery the phases are frequently accompanied by blood.

To remove dysentery, incident to relating the structures to release nerve occlusion, it is also necessary to change the diet, and especially to introduce a vegetable diet, and a wholly vegetable diet for a short time is advised.

Incident to the statement just made, in regard to

diet, it must be remembered that it is necessary to introduce a general and cardinal change in the diet of an individual to remove any phase of diarrhea.

Relating to release occlusion of stimulus in the negative phase is precisely that indicated in the preceding chapter as to the affirmative phase. Nothing further need be said with regard to that in this connection.

In closing this chapter it is again suggested that in all cases of tissue abnormality of the intestine, in addition to releasing occlusion of nerve stimulus, it is the paramount duty of the Chiropractor to control the intake of food of the patient; and it is urged that it is always an important matter in such cases to practically stop the intake of foods altogether, but in any event solid foods, until the adverse process is mastered, or at least until the tissues involved show marked symptoms of recovery.

CHAPTER XX

ABNORMALITY OF THE HEART

Affirmative: Congestion—Inflammation—Pericarditis—Carditis—Endocarditis—Palpitation—Hypertrophy.
Negative: Dilation of Heart—Organic Heart Disease.

Tissue abnormality of the heart, and indeed, the organs of liquid transportation in a general sense, have not been discussed by therapy until the graver symptoms have been reached.

The incipient phases of tissue abnormality of the heart have not been discussed in therapeutic diagnoses, and cannot be detected by the systems used.

The Chiropractic diagnostician has no difficulty in detecting slight abnormality in the organs of liquid transportation, and therefore, in the tissues of the heart, because he can detect occlusion of nerves to the heart long before the adverse conduct of that organ would proclaim its abnormality.

The incipient phases of tissue abnormality of the heart that escape the attention of the therapeutic diagnostician, sustain the same relation, in the sense of gravity, as, for instance, a cold sustains to pneumonia. The Chiropractor by his system, detects the difficulty analogously at the stage of cold, while the therapeutic diagnostician would not know it until it had reached the gravity, by analogy, of pneumonia.

In this connection, it is scarcely necessary to say that the tissue condition of the heart itself determines the

gravity of all the adverse functions of the heart, and that, of course, the tissue condition of the heart depends upon the impediments to nerve stimulus, and the consequent changes in chemical formulae, and therefore, in the process of tissue maintenance in that organ.

CONGESTION

Congestion in the tissues of the heart occurs when occlusion of stimulus in the vasomotor nerves have occurred.

The tissues of the heart are just as susceptible to congestion as tissues anywhere else; the difference being that, when the tissues of the heart are congested, the adverse situation is very much more pronounced in its effect, for impediments to liquid transportation in the heart immediately assume grave importance in their relation to the entire organism.

It would seem hardly necessary to explain that if, because of occlusion of nerve stimulus, the liquids of transportation in the tissues of the heart were congested, that fact would have a marked influence upon the whole general process of liquid transportation.

INFLAMMATION

Succeeding the congestion in the incipient, and therefore, affirmative process, there are the same general phenomena that follow congestion anywhere. There will be irritation and motor reaction, causing a concentration of force upon the heart from a wider cortical area, increasing vibration, and therefore, friction, which results in a rise in temperature.

Inflammation of the tissues of the heart, considered

by itself, is a most difficult thing to assess, and about the only symptom that can be definitely relied upon is evidence of excitement of the heart.

Of course, it is well known that in many phases of cold, all phases of pneumonia, and indeed every febrile condition, there is some inflammation of the tissue of the heart. It is only when the proposition is taken by itself in an attempt to assess the actual inflammation in heart tissues, that the problem becomes profoundly difficult.

Generally the Chiropractor is sufficiently advised by the positive evidence of occlusion of stimulus in the nerves to the heart, and the irritability or excited phase of the heart's conduct.

The inflammatory phases of the heart, and its immediate structures, are generally considered under three or more headings, which will here be stated.

(1) Pericarditis which is conceived to be an inflammation of the pericardium. Such a process, of course, never occurs by itself, but is incident to other phases of tissue abnormality, and is frequently concomitant with many grave phases, peculiarly in marked negative conditions of pronounced infiltration into the pericardium.

(2) Carditis which is an inflammation of the heart tissues themselves, and has been sufficiently discussed, except that it should be said that it is peculiarly presumed to be an inflammation of the membrane of the outside of the heart.

(3) Endocarditis is precisely the same phase as just referred to, but is presumed to be a pronounced inflammatory condition of the lining membrane of the heart.

Since the lining membranes of the heart have had more careful pathologic investigation than other parts, there is more known about it, and it will receive further discussion under organic heart disease.

PALPITATION

Incident to congestion and inflammatory conditions of the heart, there is practically always palpitation.

Palpitation is but the expression of an abnormal tissue condition of the heart in which there is a break in its rhythmic performance.

By reference to the first book of this series, " Psycho-Bio-Physiology," in the department treating of the physiology of the heart's action, the rhythmic time of the heart is given, and the student is here referred to that work for review in this connection.

Palpitation of the heart is characterized by deviations from the approximation called normal heart beat, and refers the whole matter to the irregularity of beat.

Therefore, we have the following descriptive terms, applied to the alternate systoles and diastoles of the heart: rapid, heavy, thudding, pounding, skipping, irregular, light, fluttering, tremulous, and so on.

Palpitation of the heart does not occur in persons who are not suffering from somewhat grave glandular abnormality.

It is well known that tremulous conduct of muscles under occlusion of nerve stimulus occurs as a result of incipient excitation, and light or slow heart beat may occasionally be accounted for in this way. But it must be remembered that irregular beating, pounding, skipping beats, etc., must be accounted for in some other way.

These last phases of process, and others of their nature occur in the heart only concomitant with, or as a sequence to, profound abnormality of the glands, particularly those of the liver.

It is a well-known fact that as a sequence to certain phases of abnormality in the conduct of the spleen and liver, that there follows tremulous conduct, such, for instance, as in palsy, paralysis agitans, etc. This situation is always true of the character of palpitation of the heart now under discussion.

No case of excited and irritable heart palpitation has ever occurred that did not occur concomitant with liver abnormality, or as a sequence thereto. In connection with the last paragraph, the student should also recall that when there is such chronic abnormality of the liver as indicated, there is always a complication abnormality of the kidneys, so that it can be generally laid down that palpitation of the heart only occurs when there has been precipitation in the tissues of the heart and the cardiac ganglion of abnormal chemistries produced by the abnormal liver, remaining in the liquids of transportation because of abnormal kidneys.

It will be seen that, Chiropracticly, two phases of palpitation are recognized: (1) that general agitated conduct of the tissues of the whole heart, in which all of the peculiar, irregular and excitable conduct may be performed, and (2) a peculiar holding of the systole of the ventricles, which increase the period of the beat, so-called, and give it a heavy, pounding sound, sometimes causing it to miss entirely in the rhythm.

The first phase of palpitation is very largely caused, aside from the glandular abnormality already referred

to, by occlusion of the nerves that reach the heart through the cardiac trunks from the ganglia in the cervical region, and occlusion of nerves to the cortical areas of origin of the pneumogastric nerve trunks, or by occlusion of the contributions from the cervical nerves called the vertebral accessory nerves.

The second character of palpitation is peculiarly caused by grave occlusion of kidney nerves, resulting in profound motor reaction through the visceral system, centering at the eighth cervical nerve trunk area. The nerves from this area normally control the rhythm of the systole, and for that reason function incident to occlusion of these nerves has been called the eighth cervical heart beat.

It is because of the phenomenon just mentioned that we have learned from the Japanese, in case of profound prostration in which there is absence of heart beat, to concuss the seventh cervical spine. This practice was a little intuitive Chiropractic on the part of the Japanese.

HYPERTROPHY

Hypertrophy is the inflammatory enlargement of the heart. It is a well-known fact that any tissue of the body under the affirmative phase of the congestion and inflammatory process, increases in size.

The increase in size of a tissue, however, under the affirmative phase of abnormality is not necessarily, an addition to its tissues, but is the result of a process by which it is not only congested with liquids, but is congested with a certain phase of disintegrated solids; distending its potential spaces, and

occupying those spaces to the determent of constructive processes.

Hypertrophy of the heart, then, is nothing more nor less than the same character of process and condition that occurs in any tissue of the body indicating congestive and inflammatory phases, excepting that, of course, because it is the heart, and, therefore, so closely connected with the vital process of distribution of the liquids of transportation, it is always a pronounced and dangerous condition.

The only reliable symptom of hypertrophy, in connection with the symptoms of congestion, inflammation and palpitation of the heart is its actual enlargement, which may be ascertained by careful measurement in palpation over the left thorax.

As has just been indicated, hypertrophy is usually accompanied by a very profound and irritable palpitation.

Proper diet, proper exercise, and correct rest, accompanied by an intelligent process of correction of distortions of the body, will usually serve in a much shorter time than would be expected, to reduce hypertrophy of the heart.

Of course, the student will understand that before hypertrophy of the heart can be removed, the glandular difficulties to which reference has been made in this chapter, must first be reduced, and that in ratio with the reduction of such phases will it be possible to reduce hypertrophy.

THE NEGATIVE PHASE

The negative phases of tissue condition of the heart

do not differ from those found elsewhere in other tissues.

Since, however, there is no way to definitely follow these tissue changes by the symptoms, only the simplest reference is made to such conduct.

The student will know that as a sequel to the affirmative process there will be the inflammatory catarrh, and finally the exuding catarrh of all negative tissue conditions. This may be so intense as to amount to a distinct dropsy. That phase, however, so far as the heart is concerned, is never known.

However, it is a well-known fact that infiltrations into the pericardium occur, and it is a correct deduction that infiltrations from the tissues of the heart, into the heart occur, but these are obscured by the fact that the infiltrated liquid is carried away in the blood and lymph from the heart, and do not accumulate in it.

These facts, however, must not cause the student to fail to understand that the tissue conditions here, change exactly as they do with respect to other tissues under the same phase of process.

DILATION OF HEART

Therapeutically, the whole subject of enlargement of the heart is discussed under the name of hypertrophy. However, it must be remembered that there is a distinct difference between hypertrophy and dilation of the heart.

As has just been stated, hypertrophy is incident to inflammatory or affirmative processes; while dilation is incident to the negative phase. Dilation of the heart is, therefore, always a sequel to hypertrophy, and results

when there has been such chemical change that the tissues of the heart are distorted, and its walls thin, flaccid and anemic; disintegration has so much exceeded assimilation, which has been very much reduced, that, while the heart in form occupies a great deal more space than normally, yet its actual tissue is very much reduced.

In other words, while all of its chambers are much enlarged, the walls of its chambers are very much decreased in thickness, so that actually the heart is very much smaller than it would be in the normal; assessed from the standpoint of its weight, or the actual space its tissues occupy. However, measured from the outside in such conditions, it would measure much larger than even in hypertrophy.

Dilation of the heart is a very grave tissue condition, and is usually fatal. Symptoms of dilation of the heart, following those of hypertrophy will only be such symptoms as proclaim a negative phase in the large glands, while the action of the heart will be modified from any symptom it has been expressing.

ORGANIC HEART DISEASE

Organic heart disease is a phase of tissue abnormality which represents both the affirmative and the negative processes.

Organic heart disease is a sequel to the inflammatory and palpitating processes, and also incident to hypertrophy.

However, the tissue process which ordinarily causes this phase of tissue condition to be called organic heart disease, is purely of the negative type, and occurs

when there has been sufficient precipitation of abnormal glandular toxins, urates, etc., in the subserous areas to result in endocarditis, which has gone on to such an extent that there is blistered and irregular surfaces on the valves of the auriculo-ventricular apertures, and also those at the bases of the arteries, which prevent those valves from closing blood tight.

It will be seen that if such conditions occur in the valves which should close the auriculo-ventricular apertures, there will be regurgitation at each systole back into the auricles from the ventricles.

It will also be seen that, if the same phase of abnormality occurs in the semilunar valves, that at each diastole of the ventricles there will be regurgitation from the bases of the arteries back into the ventricles.

It, of course, follows that there may be one or more areas of regurgitation; there may be regurgitation through both auriculo-ventricular orifices, or there may be regurgitation from one artery or from both.

It will be profoundly plain to the student that, if the adverse condition referred to be removed, the valves will again close blood tight, and organic heart disease will be at an end.

It will be understood that there are such grave, adverse glandular conditions, and such profound precipitations into the structures of the valves of the heart that the tissue abnormality at such areas cannot be restored.

It will also be understood that scar tissue may form upon these valves by prolonged, adverse process, of such a nature that it cannot be reduced. In either of the situations referred to in the last two paragraphs, organic heart disease cannot be removed.

However, it must be kept firmly in mind that usually these situations are not in existence, and the general, adverse glandular condition can be removed, and complete restoration of the membranes of the valves can be accomplished, in which event, the valves will close blood tight, and there will be an end of so-called organic heart disease.

The paramount symptom of organic heart disease is the sigh of regurgitating blood. This may usually be heard by placing the naked ear over the ventricular area of the thorax, and should be easily heard by the aid of the stethoscope.

The student should be cautioned to be very careful not to mistake a bronchial murmur for regurgitation of blood, as is very often done; for usually patients suffering from organic heart disease are of an aggravated phase of the typical distortion, and therefore, present a ventrally protruding left thorax, so that the left bronchus is thrown close to the thoracic surface. The author has observed this mistake in diagnosis many times, especially as incident to the anaesthetizing of persons for surgical purposes.

Relating to remove occlusion of nerve stimulus to the heart is to be particularly directed to the third thoracic nerve trunks, the eighth cervical area, the fifth cervical center and the suboccipital or first, second and third cervical areas.

By the correction advised, primary release is given to the third thoracics, but incidentally to the second and fourth thoracic trunks also, and particularly for the purpose of controlling the rhythmic beat of the heart, primarily the eighth cervical trunks, but incidentally

the release of the so-called feetward cervical ganglia thus releasing the visceral thoracic trunks, rearranged through that center.

Corrections at the fifth cervical center are for the release of the middle, so-called, cervical ganglion, but are to release thoracic nerves rearranged through those ganglia extending to the heart.

Correcting relation of the atlas, axis, and third cervical, aside from releasing cervical nerves, has the influence of also releasing the headward, so-called, cervical ganglia, which in fact release thoracic nerves rearranged through these ganglia and extending to the heart. In addition to these objects, the cervical release indicated, releases the visceral branches of the cervical nerves, which extend up inside the duramatral theca, entering the sheaths of the pneumogastric nerve trunks in the jugular foramina and thus extending to the heart.

By the means already indicated, visceral nerves extending to the cortical areas of origin of the pneumogastrics are released, thus releasing nerves extending through those sheaths to the heart, and also specifically releasing the trunks of the pneumogastric in relation ventrally with the first, second and third cervical vertebrae.

Release at the fifth cervical center also serves to release the diaphragm, which is essential many times to relieving the heart.

CHAPTER XXI

VASCULAR ABNORMALITY

Affirmative: Congestion—Inflammation—Catarrh—Hemorrhage—Aneurism.
Negative: Rupture—Arteriosclerosis—Puerpera Hemorrhagica—Lymphangitis.

At the outset, the student should turn back, and read the introductory paragraphs of the preceding chapter, for what is there said, in connection with the affirmative and negative phases of the heart, applies equally to the tissues of the vascular system.

The observations in this connection must be divided in the mind of the student into a discussion of (1) arteries, (2) veins, (3) capillaries, (4) lymph vessels and (5) lymph glands.

While the subject is thus divided, it will not be necessary to specifically discuss the phases of tissue abnormality that can occur in connection with each of these, for they are precisely similar.

It will be necessary in this chapter, however, to differentiate as to some important propositions, as the same peculiarly relate to capillaries, lymph vessels and lymph glands.

CONGESTION

Congestion occurs in any part of the vascular system, to which the nerves are occluded.

It will be seen that since the vascular system is

co-extensive with the entire organism, anything like a specific discussion of the whole subject is an impossibility, and the theme can only be treated in the most general way.

The student will understand that in order to know in what vascular area tissue abnormality is occurring he must be able to extend his investigations from the area of vertebral occlusion to subsequent areas of occlusion, and to the periphery of the nerves involved.

This is sometimes a simple procedure, and sometimes a very complex one. However, if the student is proficient in anatomic palpation, he will never be at a loss in his effort to reach the correct diagnosis.

INFLAMMATION

Inflammation, of course, always occurs in the affirmative phase, where there is congestion, and the locations of inflammation will be co-extensive with those of congestion. The difficulty here, as elsewhere, occurs because of occlusion of stimulus to the area; congestion within the area, which serves to change the formula of chemistry, producing an irritant, which causes motor reaction, and therefore, concentration from a wider cortical area, increasing vibration, and therefore, friction, resulting in superheat.

Inflammation could not occur without a lessening of assimilation, and an increase of disintegration in the area, which prepares the way, and renders necessary an increased elimination.

CATARRH

Inflammatory catarrh is the name of the peculiar situation just referred to, which is a process of

depuration of accumulated morbidity incident to congestion and inflammation.

In catarrh it frequently occurs that there has been such a profound disintegration, or breaking down of tissue structures, that, incident to depuration certain complications occur.

HEMORRHAGE

Hemorrhage is one of the pronounced complications that occur as incident to exuding catarrh in the vessels of liquid transportation.

Hemorrhage of the kind to which the student's attention is now directed, occurs as incident to catarrh, where the substance of the capillary walls has been so depleted that the winking valves do not close with normal virility, presenting a certain degree of flaccidity, in which the little mouths or orifices are actually increased in size, so that red corpuscles actually escape through the winking valves.

In a hemorrhage of the kind just referred to, it must be remembered that white corpuscles also sometimes escape, but these are not observed, because they lack color, but are observed when blood thus escaped has been permitted to clot.

Hemorrhage of the kind just described is stopped when the capillary tissues involved have been rehabilitated, or if the exudation of blood is because of flaccidity or relaxation, when the capillary tissues have been restored to tone. In nearly all phases of hemorrhage now under discussion, release of nerve stimulus to the area, will effect a restoration of tone in the capillaries, sufficient to render their winking valves resistant to the

passage of corpuscles. In very rare cases, to secure this result requires much time, and occasionally cannot be accomplished.

In the other phase of hemorrhage referred to, attention is directed to trauma, and of course, the subject includes all phases of exudations of blood or lymph because of injury.

The injuries referred to, as causing hemorrhage, may be bruises, tears, cuts, lacerations, etc. In such injuries the capillaries are actually opened, and frequently large vessels. When these occur in small capillaries, release of occlusion to the area will nearly always have the effect of quickly producing lymph and blood clot of sufficient density to stop the abnormal orifices; permitting accommodative anastomoses to supply the area, until rehabilitation of the injured parts has taken place.

In the larger vessels, however, extraneous assistance must be lent to the functional office, which is accomplished by ligature, or other means, which artificially closes the open vessels, until they are rehabilitated.

In any phase of hemorrhage, release of occlusion to the area is of the first importance.

Incidental hemorrhages need not be considered of much importance, but are always, except when caused by direct trauma, indicative of grave tissue difficulty, which need not be overestimated as to gravity, but should always put the person on guard that his condition requires specific and judicious attention.

Of course, traumatic injury, which results in hemorrhage, should have immediate and controlling attention.

ANEURYSM

Aneurysm is a term, used therapeutically to express abnormal dilation or enlargement of an artery, but, of course, should also include any blood vessel.

Aneurysm is a tissue condition precisely analogous to hypertrophy or dilation of the heart, and as in those conditions, it also follows an inflammatory tissue process, just as dilation in any muscular tissue always follows an inflammatory process.

The tissue condition called aneurysm occurs when occlusion of stimulus is marked, and generally to some circumscribed part of an artery, in which event it becomes dilated, and in a sense forms a pocket in the artery.

An aneurysm may take place at any area of an artery, but generally occurs at areas easily affected by occlusion. These include the larger arteries near the heart, the abdominal aorta, the carotid arteries, the arteries relative to the knee joint and so forth.

Aneurysm occurring in the thoracic aorta beginning at its ascending portion, furnishes an illustration of occlusion produced by visceral displacement; for the enlargement of the aorta in this area impinges upon the trachea, and indeed, the mediastinal tissues generally, producing occlusion in the nerves locally, which becomes widespread by motor reaction, resulting in extensive vertebral constriction and occlusion.

Therapeutically, aneurysm is described as being (1) true, or (2) false.

These tissue phases are distinguished in the following manner: true aneurysm is said to be a sac-like dilation in the walls of the arteries, only the walls are unbroken;

false aneurysm is said to be a tissue condition in which the coats of the arteries are ruptured, and the surrounding tissues of the artery retains the blood in a pocket. They may occur single or multiple, and, of course, vary greatly in size.

Generally aneurysms result from the direct influence of occlusion of stimulus to the area, but, of course, they may be produced by direct injury to an area, but in either event there will be specific occlusion of nerve stimulus to the area; for in the latter case the injury will serve, by motor reaction, to produce specific occlusion.

Aneurysms are classified according to their form as (a) sacculated, (b) fusiform, (c) dessective, (d) false.

These different names, however, are only intended to give illustrations of the adverse tissue process, and further discussion of them here would be of no value.

It will be observed that the primary danger in aneurysm is that an open rupture in a large artery, not sufficiently exposed to be reached for assistance, may occur, from which the person will bleed to death before assistance can intervene. But, of course, the large thoracic, abdominal and other hidden arteries can not be reached in time, if at all, to prevent death.

Of course, aneurysm of such gravity as indicated in the preceding paragraph occurs very seldom, and indeed never occurs, if at the incipient symptoms, correction of distortion is performed to remove occlusion to the area.

Aneurysm is just as true of the veins as of the arteries, but the therapeutic world has selected different names to indicate the same character of abnormality. The

weakened condition incident to the inflammatory phase they call phlebitis, and indicate what they call chronic phlebitis, or phlebosclerosis is substantially identical with arteriosclerosis.

Varicose veins is the general title under which all aneurysms of the veins are classified.

As the student will understand, varicose veins are a sequel to congestion and inflammatory conditions in the veins of a local area, the walls of which have become greatly dilated, and filled with a quasi-stagnant blood.

Distension of the walls of veins of an area is an abnormality which may become so great that in order to secure recovery dissection of some of the masses is necessary.

Generally, however, complete recovery will occur by releasing occlusion of stimulus to the area, assisted by taking the weight off the part, which in aggravated cases in scrotum requires the person to assume the recumbent position for several weeks.

THE NEGATIVE PHASE

Negative tissue conditions with respect to vascularity are identical with those of the heart, and need not be discussed further than to say that they always present a weakened and distended tissue pocket, or weakened parts without distension.

RUPTURE

Rupture of arteries and veins, but especially of capillaries, occurs with peculiar frequency as incident to the congestive, inflammatory and catarrhal phases of vessels which have been described in this chapter.

Of course, the phase of rupture now under discussion is not that which occurs incident to aneurysm definitely speaking, but occurs as the result of injury, or sudden culmination of tissue degeneracy.

As has been indicated, in rupture of large vessels, immediate surgical assistance is indicated. In small vessels and capillaries release of occlusion to the area, and placing the part so that it will be assisted by gravity will be all that is necessary for recovery.

ARTERIOSCLEROSIS

Sclerosis means hardening or thickening, or both hardening and thickening of the walls of arteries and veins.

Sclerosis in the vessels of transportation presents the very opposite condition from aneurism, but presents differentiated phases of the same nature as those, for instance, enlargement of the liver, and cirrhosis of the liver.

Arteriosclerosis, speaking therapeutically, would be confined to the arteries, but there is no occasion for such a distinction, for the same general processes occur both as to arteries and veins.

So-called arteriosclerosis never occurs except in persons that are gravely abnormal as to the liver or kidneys. Indeed, the liver and kidneys, for that is the order in which the affection takes place, and, of course, both of these phases must have been in existence long enough to have become chronic.

Sclerosis of the arteries or veins really amounts to rheumatism within the walls of such vessels; the areas affected becoming subject to calcareous deposit, so that

the walls of the vessels thicken and harden, and incidentally become very brittle.

The adverse functional effect of arteriosclerosis is that systole and diastole of the arteries is rendered very much less, or is entirely lost, which has a marked effect upon the blood, and, of course, serves to lessen the lumen of arteries and veins, and depletes their receptiveness to the necessities of blood transportation.

Aside from the debility just mentioned, the danger of sudden rupture, resulting in fatal hemorrhage, must be considered.

The symptoms of these adverse conditions are not very definite until in their very aggravated stages. Chronic congestion in certain areas is about the most profound symptom.

If taken in time, aneurism and arteriosclerosis can be completely removed, but just as in all other abnormal tissue phases, a condition may be reached in which correction will be impossible. These, however, very seldom occur, and if the principles of Chiropractic are applied when the first symptoms of abnormality appear, these aggravated phases will never be reached.

PUERPERA HEMORRHAGICA

This phase of abnormality is a capillary hemorrhage, and, of course, occurs because the capillary walls are so distended that red corpuscles pass out through the winking valves and may be seen through the superficial skin. This phase of tissue difficulty occurs in the subcutaneous and submucous areas of the body. In other words, in the areolar tissue, by which the skin and mucous membranes are attached to their subjacent structures.

The phase of abnormality under discussion occurs as incident to many adverse processes, and is always an indication of grave, general tissue abnormality.

Puerpera hemorrhagica never occurs in cases except those in which kidney abnormality is chronic, and has been dominant for a long time.

Usually correction should be directed to the release of nerves primarily, but usually the large, digestive glands and quite generally the large glands of the body.

LYMPHANGITIS

This is the name therapy has given to an inflammation of the lymph vessels. The general phases of this discussion have been sufficiently covered with respect to aneurysm and sclerosis, that nothing further need be said in this connection, except as regards lymph glands, further than to say that when extensive areas are acting under pronounced stases from occlusion, there is lymph hemorrhage, and therefore general infiltration, which results in it becoming almost impossible to secure depuration from such areas.

Referring the discussion to lymph glands, of course, occlusion results in these becoming more distended by congestion and very inactive, therefore, failing in performance of their paramount function, which is the production of leucocytes, in which event, if the areas involved are large, there will be a pronounced reduction of leucocytes and, therefore, a great falling off of white corpuscles, which, if continued sufficiently long, will result in a marked lessening of red corpuscles, which simply means failure of depuration, and a progressive toxination. There will be a much more extended discus-

sion of this phase in connection with venereal disease.

Relating to secure release of nerve stimulus, incident to the various phase of tissue abnormality discussed herein, will always be directed to securing release of the nerves to the area primarily as they may be interfered with by distortions in the vertebral column, and incidentally as they may be interfered with in their extension to the place of ramification.

In order to illustrate what is here meant; suppose there is aneurysm at the knee, then it will not only be necessary to release occlusion at the exit of the lumbar trunks extending to that area, but to release sacro-iliac, sciatic and fascial interferences with the nerves of those trunks, from the point of their exit at the vertebral column to their periphery.

It will be seen that no distinct area can be given, but these must be searched out by the Chiropractor, and for that purpose he must rely upon his anatomic proficiency.

CHAPTER XXII

RESPIRATORY ABNORMALITY—AFFIRMATIVE

Nose—Pharynx—Croup—Diphtheria—Larynx—Laryngitis—Trachea—Bronchi—Lungs—Pleurisy—Pneumonia—La Grippe—Spanish Influenza

The affirmative process in tissue abnormality has been sufficiently discussed in the preceding chapters herein that the most superficial review is all that is necessary in this connection.

It will be understood that the phases of abnormality to be discussed in this chapter will begin with the tubes of the nose, and will follow the tissue walls down through the pharynx, larynx, trachea, bronchi, bronchioles, atria or infundibula and alveoli, or the terminations of the air tubes, and will also include the lungs and their membranous coverings, and linings of the thoracic wall called the pleura.

The phases of abnormality discussed herein are based upon the fundamentals; occlusion of nerve stimulus, causing congestion and inflammation, resulting in such pronounced changes in chemical formula in the area affected as to lessen assimilation, increase disintegration and at the same time increase morbid retention.

The changes in chemistry referred to amount to an irritant, which serves to produce motor reaction and the concentration of stimulus from a wider cortical area to the area affected, resulting in an increased friction, and therefore, elevated temperature, for it will be remem-

bered that all affirmative phases are accompanied by elevated temperature.

NOSE

While all of the adverse processes that can occur anywhere, occur in the respiratory tissues of the nose, yet, generally speaking, about the only phase that is credited to it is that of catarrh. However, it must be remembered that under occlusion of stimulus to the nose, it undergoes congestion, inflammatory catarrh, and finally exuding catarrh.

The tissue changes, effected in the nose, result frequently in scar tissue formations, and polypi or fungus growths, in changes of the relations of the walls of the nose by constriction incident to occlusion, thus immediately affecting respiration.

Each of the various phases of abnormality discussed express their pronounced symptoms by their presence and the influences they have on respiration. It is the duty of the Chiropractor to remove occlusion to the nose, and to secure such regulation of its shape as to remove all impediments to inspiration primarily, and respiration generally.

PHARYNX

The various phases of abnormality that occur in the pharynx have been discussed. It is only necessary in this connection to refer to the same, and call attention to the fact that the pharynx is frequently, as it were, the theatre of the war in respiratory difficulties.

As has already been stated, under occlusion of stimulus, the pharynx is an area of congestion, inflammation

and catarrhal condition, which may in a majority of cases be referred to as adenoiditis. However, the pharynx is the seat of many phases of abnormality of a grave type, and these should be discussed in this connection.

CROUP

Croup is an acute, inflammatory process occurring in chronically abnormal tissue of the pharynx.

The peculiar symptoms presented by croup are congestion, inflammation and swelling of the true tonsils, the isthmus of the fauces, and the relative structures of the tonsillar ring. There is a proliferation of what really constitutes a fungus; gray in color, and not dissimilar to that found in so-called diphtheria. If the gray membrane is forcibly removed, it will be found that the underlying surfaces, however, are not so red nor inflamed as those in diphtheria.

The croup accumulation usually occurs very rapidly, and the great danger of croup is that the person will strangle to death, because of occlusion of the air passage.

Incident to the croupous accumulation, the cervical tissues are in a state of profound constriction. The longitudinal muscles of the neck are also profoundly constricted, and this constriction extends down to about the eighth thoracic vertebra.

In the young child (and croup is nearly always confined to children), there will be an acute kyphosed area, extending usually from the first to the fifth thoracic vertebra, incident to the intensity of constriction.

The *relating* indicated is release of the cervical constriction by the longitudinal traction, and the reduction

of the acute kyphosis by the broad hand contact, and usually these procedures with proper attention to the pharynx, which will sometimes require removing the accumulations from the throat, will be sufficient.

DIPHTHERIA

Diphtheria really comes within the classification of constitutional abnormality, although its pronounced and most noticeable symptoms occur in the throat.

It must be remembered that the adverse process is incident to a chronic abnormality of the kidneys, and the adverse glandular phases that occur as incident to motor reaction therefrom which serves to produce occlusion of nerves to the thyroids, and the lymph gland areas of the whole cervical region.

Diphtheria presents a great range of gravity, from only a slight temperature, with soreness of the throat, to a process of such intensity as to soon result in death.

Generally the onset of the phase is sudden, occurring by pronounced chill, which is soon succeeded to by a high fever, which will always be of a gravity proportionate to the gravity of the chill.

Diphtheria almost always occurs in children; has been observed, however, in adults, but it never occurs in any person, except those suffering from hereditary or congenital kidney abnormality of a chronic type.

The throat aspects are manifested by swollen lymph tissues, and the mucous membrane generally, which is red and covered with a thin, gray substance, called the diphtheritic membrane, which, if the case is grave, soon becomes thick and tough, and of a whitish or ashy color.

This so-called membrane is simply the solid residue

of catarrhal elimination from the gland tissues of the throat, and of course varies much in different cases. In graver cases it forms an unbroken sheet over the tonsils, and back of the throat, sometimes almost obstructing the respiratory passage, and occasionally entirely so. In milder cases it only appears in patches over the tonsils and back of the throat.

If the gray or ashy colored diphtheritic membrane should be suddenly torn, there will be observed a bright red and bleeding surface, over which new membrane will be quickly reformed. In connection with the formation of this membrane, it will be remembered that there is swelling of the parotid glands, and of the cervical glands, and also inflammation of the larynx.

Diphtheria so-called is unquestionably of environmental origin. It frequently occurs sporadically, but many times in epidemics. But when it occurs in epidemics, it is nearly always confined to circumscribed territory.

The therapeutic world does not profess to present a cure for diphtheria. Their means for its cure lies in what they consider to be a preventive, or prophylactic injection of a serum called anti-toxin.

Statistics plainly show that anti-toxin does not prevent diphtheria, and also that the disastrous effects of its inoculation are very much more widespread and injurious than is the so-called diphtheria.

In connection with anti-toxin, laymen should know enough about the body to understand that a poison can not be injected into it that will have the effect of purifying it, and they know that the thing to be altogether desired, to remove any abnormal phase, is to

remove all toxins from the body. Nothing more absurd or destructive than the serum theory has ever been devised or promulgated.

In diphtheria in children, the longitudinal traction properly applied to the neck, with the broad hand release of the headward thoracic kyphosis will be all that is necessary except the further release of the kidney nerves, and usually stomach nerves, because there will be motor reaction from the kidney area to the stomach. In addition to these, however, careful attention should be given to the throat, and if the membrane is formed so rapidly as to encroach upon respiration, it should be removed by direct means.

It can usually be swabbed from the throat, but in any event, it must be kept from interfering with respiration, until, by relating, the nerves are released, in which event it will begin to disintegrate under the reparative influences incident to restored function.

LARYNX

The phases of abnormality of the larynx are very numerous, since that organ has such a multiplicity of functions to perform. The student, however, will keep in mind that this discussion is particularly directed to respiration.

However, in this connection it must be said that incident to congestion, inflammation, inflammatory catarrh, there will be many disturbances of speech; the most pronounced of which is that called aphonia.

Aphonia is loss of voice. This occurs as a result of inflammation, constriction, and fixation of the vocal processes, so that it is impossible to properly vibrate the

expiring air, and direct it against the resonant apparatus of the head in such way as to produce voice.

The peculiar changes that take place in the vocal processes in aphonia result in their being too closely approximated, in which event sound is produced which will be but a squeal, or of their being constricted but too widely apart so if any sound be produced, it will be but a gurgle. Sometimes the constriction and fixation is so great that no sound of any kind can be produced.

Of course, the larynx is subject to exuding catarrh, not only from its own walls, but from the tubes below, which must be discussed in connection with other phases.

LARYNGITIS

Practically all of the phases of abnormality of the larynx come under that very comprehensive term, which simply means an inflammation of the larynx. Or, in other words, it is the result of occlusion of stimulus, congestion and inflammation of the tissues of the larynx.

This phase of abnormality is frequently brought about by what is ordinarily called catching cold, but is many times brought about by abnormal and straining uses of the larynx. For this reason it has been called "clergyman's sore throat." This name was applied many years ago, when it was the custom for preachers to labor at eloquence, which has happily fallen into disuse.

Occlusion, causing laryngitis is of the fourth and third thoracic nerves, and nerves of immediate ramification from the pneumogastric trunks.

In order to release the area immediately feetward to the skull, and therefore, to release the nerves ramifying

the larynx from that area, it is sometimes necessary to produce dorsal movement of the first three cervical vertebrae, thus releasing the thoracico-cervical ganglia, and the pneumogastric trunks.

Many times laryngitis occurs because of irritation that peculiarly centers at the kidney areas, or the liver areas, and many times, of course, from both, and when this application is apparent, not only must the primary irritation be removed, but occlusion of these areas, so that reaction from these centers through the nerves ramifying the larynx will be aborted.

TRACHEA

Of course, it must be well understood that the tissues of the traches are involved in all of the various phases of difficulty of any of the other tubes of the body, peculiarly other air tubes. Therapy has not differentiated in the naming of phases of abnormality of the trachea.

It goes without saying that tracheitis, being Chiropracticly translated, simply means that there is occlusion of the nerves to the trachea, resulting in inflammation with an elevated temperature, succeeded to by inflammatory catarrh, and finally by exuding catarrh. However, all these phases are generally treated of therapeutically under abnormality of the bronchi, and will be discussed in that connection.

BRONCHITIS

Bronchitis is an acute inflammatory phase of abnormality affecting chronically abnormal bronchial tissues. This is not the therapeutic conception, but is the simple truth about the matter.

Therapeutically, bronchitis has been given a very broad scope, and includes the entire bronchi, bronchioles, alveoli, and infundibula, which, of course, would include all of the phases of respiratory abnormality from the beginning of the trachea down.

No real assistance to the student is accomplished by discussing bronchitis further than to call attention to the fact that many times inflammatory processes of the trachea, and bronchi do occur, which only to a slight extent involve the atria and lung tissue.

The paramount symptoms of bronchitis are expressed in what people generally call a deep cold. This sense of a deep cold is usually accompanied by great constriction and rigidity of the muscles of the upper part of the neck, and the headward part of the thorax, accompanied by a feeling of soreness and rawness in the tubes themselves.

At the first onset of bronchitis there is usually a hacking cough, which is sometimes quite painful. The process always begins by a sense of chill, and with the chilly sensations there is an elevated temperature. In graver cases the chill is pronounced, and so is the accompanying fever. There will be evidences of congestion in the fore part of the brain, the eyeballs, and tissues of the orbit.

Release of nerves to the trachea and bronchial tubes will usually serve to reduce this process in a short time.

Relating is addressed to the fourth thoracic, eighth cervical, and incidentally the first, second and third cervicals, because of the influence constriction at these areas cast upon the nerves rearranged through the cervico-thoracic ganglia, and also upon the pneumogastric trunks.

LUNGS

Many phases of abnormality occur in the lungs, and these really should have specific attention, but if the student will remember that all phases of tissue abnormality that occur anywhere, can occur in the tissues of the lungs, he will not be without assistance.

The incipient, acute, inflammatory phases of abnormality of the lungs have not been described therapeutically.

Incipient phases of abnormality of the tissue of the lungs occurs as incident to occlusion of stimulus, congestion, inflammation and inflammatory catarrh, in lung tissue, with, of course, the subsequent exuding catarrh.

As to these phases the therapeutists have satisfied themselves by classifying them as colds, and it is only when the phases become pronounced and the exudation profound that they have any resort to specific names. Some of these are discussed herein, and some in subsequent chapters.

PLEURISY

Therapeutically, pleurisy has been discussed as being an inflammation of the pleural membrane lining, the thoracic cavity, that covering the lungs, or both. Of course, it is perfectly clear that pleurisy is nothing of the kind, but that it may be, and usually is an inflammation of the pleura lining the thorax, in connection with an inflammatory process of the intercostal tissues of the same areas respectively.

Inflammation of the pleural membrane covering the lungs is completely included in phases of abnormality of the lungs *per se*, and is not involved in pleurisy specifically speaking.

The general symptoms of pleurisy are precisely identical with those of so-called pneumonia, except that there is generally a more aggravated intercostal difficulty, with very sharp pain radiated from the region of the nipple to the axilla on the side affected, or both sides if the pleurisy is double.

In connection with pleurisy neglected, there sometimes occurs an infiltration into the pleural cavities, and this sometimes becomes so grave that aspiration—the puncture by a hollow needle securing drainage of the cavity, is employed. However, if the principles of Chiropractic are applied in anything like the early phases of pleurisy, it quickly subsides, and restoration soon follows.

Relating to remove pleurisy is precisely identical with that of pneumonia, and the student is referred to that subject for advice.

PNEUMONIA

Pneumonia is usually classified as an acute congestion and inflammation of the lung tissue.

However, it must be stated that pneumonia would not occur if the tissues involved were not already chronically abnormal and of indifferent resistance.

Pneumonia, usually, if not always, begins with a pronounced chill, which is soon succeeded to by an elevated temperature of equal gravity, which if not properly attended produces a very grave situation.

Some of the pronounced symptoms of pneumonia are hot, dry skin; great sense of thirst; pain in the head and eyes, with pronounced inactivity of the digestive system; congestion of the face, and generally with a

bright, red spot on one or both cheeks, all of which symptoms are accompanied by a sense of great rigidity and tonicity of the thorax, accompanied by a dry, ringing cough, which occasions the patient much pain, by which he raises no phlegm. The breath is short and labored, while the pulse is rapid and feeble.

Pneumonia may be classed as lobar or lobular. That is, it may effect but one lobe specifically or it may effect all of the lobes of a lung, and indeed, may be double pneumonia, affecting both lungs.

Many phases of pneumonia occur to which therapeutists have given very refined distinctions. It is sufficient to say that in some phases of pneumonia there is much accumulation of a pus-like formation. In others, on account of the breaking down of intertubular tissue, there will be accumulation of blood and lymph and morbidity in the potential spaces thus produced, and frequently in the more advanced stages there will be infiltrations and dropsical accumulations in the lungs, and many times an infiltration into a cavity, such as occurs incident to pleurisy.

The proper care of a pneumonia patient is to have him in a comfortable bed in a light and comfortable room, from which the direct rays of the sun are excluded, and into which there is admitted a free passage of air without draft. The temperature should be kept at about seventy-five degrees Fahrenheit. The patient should wear substantially no clothing, and have light covering.

Careful attention should be given to the release of the headward four thoracic areas, the eighth and fifth cervical, and in the sub-occipital area with particular attention to the release of the pneumogastric nerve

trunks at the base of the skull, and to release nerves ramifying the cortical origins of the pneumogastric nerve trunks, which will almost always be found to be occlusion of kidney nerves, but will also be found to be those at the liver area.

LA GRIPPE

The name la grippe is applied to a sudden, severe, catarrhal fever, which usually occurs in epidemics during the abruptly changing weather of fall and spring. Just what the irritant is that produces this phase of abnormality has not been ascertained, but there is sufficient evidence to disclose that it is wholly environmental.

This phase of abnormality does not only peculiarly affect all of the glands of the body, but also very greatly affects the tissues of the brain; sometimes resulting in almost complete prostration, and occasionally in loss of mentality.

In addition to the general symptoms of a profound character, there will be a sensation of profound prostration of the brain, accompanied by inability to perform mental labor, and, of course, in graver cases accompanied by delirium.

The symptoms of so-called la grippe are generally those indicating that all the organs of the body are involved. It is because of this fact that frequently individuals suffering from this phase continue to grow worse, and are said by therapeutists to develop other diseases.

A person affected in this manner should be immediately put to bed in a warm, dry, comfortable room, with plenty of free air, which should not be permitted to

strike upon the patient. There should be a complete cessation of foods of every kind, unless possibly strained vegetable broth taken hot, and the patient should have plenty of water. The temperature of the room should be kept at about eighty degrees Fahrenheit, and the patient should be either kept naked, or with a light gown and only a light sheet for covering.

Relating to remove this phase of abnormality it will be observed, must be constitutional and general, and should be performed from two to four times daily. Of course, it will go without saying that release of the nerves to the areas particularly affected is of primary attention.

SPANISH INFLUENZA

Spanish Influenza is an acute inflammatory phase, completely epidemic in its nature.

Its first pronounced occurrence took place in the fall of 1918, and there has been some slight return of it subsequent thereto, but not to any considerable extent. The exciting cause is undoubtedly an atmospheric condition. The therapeutic world, of course, thought it was contagious, but it was clearly demonstrated not to be so.

Like la grippe, Spanish Influenza is a general attack and effects all of the glands of the body, and indeed all of the tissues of the body, but specifically acts upon the muscles of the body.

The irritant, whatever it was, had the effect of producing motor reaction with great muscular constriction and fixation, which universally centered at the area of the fourth thoracic. Of course, the kidneys and liver were profoundly involved.

Chiropractors handled these cases successfully. The statistics show that over the entire United States, the loss by death in all of the cases to which Chiropractic attention was given was one-tenth of one per cent. In Oklahoma City, the fourth city in gravity of this epidemic, the Chiropractors cared for over half as many cases as the entire medical profession without the loss of a single case.

The *relating* attention in Spanish Influenza is primarily release at the fourth thoracic area, but of course, release must be had to all of the large glands, and attention should be directed to releasing all of the longitudinal and large somatic, muscular areas.

CHAPTER XXIII

RESPIRATORY ABNORMALITY—NEGATIVE

Nose—Catarrh—Abscess—Asthma—Hay Fever—Emphysema—Empyema—Galloping Consumption

The negative phase of respiratory abnormality is marked by many pronounced tissue conditions, which must be here explained.

The first thing to which the student's attention is directly called is the fact that when abnormal respiratory processes have reached the negative phases, there is always marked distortion of the thorax.

The distortions referred to are peculiar and usually striking, and are those changes which have been brought about by muscular, fascial, and ligamentous constriction incident to the structures of the thorax.

It is common at this stage of abnormality, for the lateral curvature of the ribs to be increased, while the heads of the costal aspects thereof are approximated, thus markedly widening the chest, and in ratio thinning it dorso-ventrally.

This, of course, serves to put abnormal pressure upon the viscera dorso-ventrally, and distension laterally, interfering with the nerves ramifying the viscera by actually distorting the viscera.

Another marked phase of distortion incident to respiratory abnormality occurs in loss of lateral rotundity of the ribs, thus diverging the heads and costal aspects, producing "barrel" or "chicken

breasted" condition, which serves to put abnormal pressure upon the viscera laterally, and distension dorso-ventrally; therefore impinging the nerves by lateral pressure, and occluding them by traction dorso-ventrally.

Another marked distortion occurs as incident to the diaphragm particularly, in which, because of chronic constriction of the tendon and median aspects, the enciform cartilage is drawn dorso-headwardly, producing repression of the feetward extremities of the sternum, permitting the domes of the diaphragm to encroach upon the lung spaces headwardly and to present a rigidity resistive to respiratory function.

By this abnormal conduct of the diaphragm, occlusion of nerve stimulus is caused by abnormal diaphragmatic pressure in a headward and dorsal direction, and occlusion of stimulus by lateral traction of the lung tissues.

Distortions of the nose have been sufficiently discussed in the affirmative phase.

It is only necessary here to call attention to the fact that in the negative phase, respiration is frequently interfered with by distortions in the neck, peculiarly at the intake of the thorax.

It is because of the situations here discussed and pointed out that consumptives present a characteristically distorted thorax.

EXUDING CATARRH

Catarrh has been sufficiently discussed with respect to the nose, pharynx, larynx and also the trachea; for exuding catarrh is a sequence to inflammatory catarrh and always occurs incident to any chronic, affirmative

process. Its aggravating phases become pronounced, however, when applied to the bronchi and smaller tubes of the lungs.

It is the catarrhal discharge that sets up that functional depuratory process ordinarily called coughing. Of course, inflammatory catarrh will accomplish that result, but it is only in the chronic and exuding form that it becomes prolonged and pronounced and exceedingly destructive.

The process of coughing while it is intended to be assistive, may as easily become destructive; for it is accomplished by muscular paroxysm, which has direct influence upon the vertebral column, and intercostal areas, to say nothing of the diaphragm, and where individuals form the habit of coughing they are sometimes very depleted by its effects.

It sometimes occurs that catarrhal exudation is so excessive as to seriously affect the intertubular tissues, inducing a series of adverse processes.

ABSCESS

Abscess occurs as incident to the atria of the lungs, where stases become complete. Generally such abscesses break down, and discharge from the tubes; the substance being depurated in the ordinary way.

Sometimes, however, abscesses are so prolonged and numerous, as to seriously injure the tissues of the intertubular areas, introducing other pronounced defects.

EMPHYSEMA

Following abscessed conditions, the cell partitions are frequently broken down and disintegrated to such

an extent as to make spaces around the atria; that is to say, the partitions between the alveoli disintegrate so as to leave large air cavities. This condition is called emphysema.

The pronounced symptom of emphysema is that it requires much more time and effort on the part of subject to expel air than to inspire it. In this phase, whereas ordinarily inspiration requires a very much longer time than expiration, the process is reversed, and expiration requires more time than inspiration.

Usually as a corroborating symptom, the whistling sound of the air being forced from the large cavities can be heard by placing the naked ear over the thorax, and can usually and easily be heard with the stethoscope. This phase of abnormality used to be considered beyond help, but where the case has not gone too far, the application of the principles of Chiropractic will usually entirely restore the patient.

The author has seen a number of cases that were indeed in very grave condition fully restored. As would be expected, however, restoration requires considerable time, and very careful and regular corrective application.

Asthma and hay fever are fully discussed under "Combination Abnormality" in Chapter XXIX and therefore, will receive no further notice at this time, other than the statement that frequently the incipient phase of emphysema appears under what is called bronchitis and asthma. However, when asthma has been discussed, it will be fully understood why this statement is true.

However, it must be remembered that in asthma, inspiration is performed with great labor, and is very

labored compared with expiration, while the very reverse is true of emphysema.

EMPYEMA

Incident to abscess within the lungs, frequently there occurs what is called empyema, which simply signifies pus in a cavity.

In such situations, it will be understood that the intertubular, cellular tissue is breaking down and disintegrating, and because it does not find an avenue of escape is transmuted into pus, and can only escape when disintegration has occurred into some tube. The pronounced symptom of empyema is what is called septic fever; that is to say sudden chill, and rise of temperature sometimes without any apparent cause, but is the result of accumulation of pus, which always introduces the same character of symptoms when it occurs anywhere in the organism.

It must be remembered, however, that in empyema the rise of temperature will be more sudden and pronounced, and sometimes prolonged, because of the character of tissue in which it occurs. In other words, on account of its occurring in what is called "vital tissue."

GALLOPING CONSUMPTION

In this phase of tissue condition of the lungs, it will be observed that by reason of decreased assimilation, increased disintegration, and retention of morbidity, because of an ever-widening and intensifying occlusion of stimulus to the area, the tissues are weak, distended, flaccid and invirile, and are composed of a very non-resistant substance.

Galloping consumption so-called only occurs in those persons of chronically or hereditarily weak lung construction. It is a phase of abnormality that is frequent in the children of inbred parents. It also frequently occurs in the children of parents that were improperly mated.

It sustains no relation to what is ordinarily called tuberculosis, further than it is a breaking down of lung tissue. But its processes are very rapid, and in its incipiency there are no tubercles. It is just a progressive, rapid degeneration to a usually fatal result.

If the case has the principles of Chiropractic applied at its very incipiency, it may be checked, and the patient restored. However, if the process has gone on until so much lung tissue has been disintegrated that reasonably good aeration cannot be accomplished, the case will be fatal.

If alimentation is reasonably good, the diet of such patients should consist of one simple and nutritious food administered at a time, not to exceed three times a day.

The patient should, of course, have the best of surroundings, being kept dry and warm, and free from all exposure, and as quiet as possible.

The environment should be as congenial as possible, and therefore, usually, the best location will be a mountain valley about two thousand feet above the sea, and land-locked, where the temperature has very little variance.

Relating to remove abscess of the lung, emphysema, empyema, and galloping consumption will be to correct the relation of the fourth and third thoracic centers; the eighth cervical, and first thoracic areas; the fifth

and sixth cervicals and the suboccipital, or first, second and third cervical areas.

The correction referred to is for the purpose of releasing the headward thoracic nerve trunks, and the thoracico-cervical ganglia located in the cervical region. Also to release the nerves of the spinal accessory, which extend through the pneumogastric trunks. Incidentally also to release the phrenic trunks so as to secure release of the diaphragm.

To secure still further thoracic release, it will be found necessary to relate the vertebrae at the liver area, and to further relax the diaphragm it will be frequently found necessary to perform relating at the eleventh and twelfth thoracic areas.

It will also be necessary to secure active depuration through the kidneys, as well as the small intestine.

CHAPTER XXIV

ABNORMALITY OF SKIN

Under the caption of "diseases of the skin" therapeutists designate something over two hundred. This, of course, is very erroneous and very deceiving.

It must, of course, be understood that there is skin abnormality, which means change in the chemistry, size, form, shape and relation of the formative particles but the pathology is all one, expressed in a multitude of phases.

Abnormality of the skin presents the two phases that have been so carefully discussed several times in this work—the affirmative and negative—and these will be only briefly noted separately herein.

As a prefatory thought to any discussion of the skin, the student must remember that the skin, taken altogether, presents the most extensive depuratory system of the whole organism. Indeed, there are large portions of the body to which the skin is the only means of depuration and elimination, except that which incidentally takes place through lymph movement.

In the ordinary sense it is the function of the skin to eliminate gases and certain liquids from the peripheral lymph areas of the body, particularly the subcutaneous, submucous and subserous areolar tissues, and the student will remember that this function is very comprehensive when he carefully takes into account the whole organism.

The student will understand how extensively pathology of the skin affects the whole organism, when he remembers that under the pathologic process incident to skin abnormality, the lining of all the vessels and tubes of the body, with their subjacent structures may be involved, which will include arteries, veins, capillaries, lymph vessels, bladders, sacs, (which includes the urinary and gall bladder with their several tubes) the ventricles of the brain, the meninges of the brain and cord, together with the sinuses and antri of the head, and all the marrow cavities of bones, and the lymph glands and subcutaneous tissues of the whole body.

It must be remembered that abnormality of the skin seldom, if ever, occurs by itself, but that it is almost universally the outward expression of some grave abnormality of the viscera generally, or some part of it especially, but more particularly and specifically it is the expression of grave visceral, glandular abnormality.

Pathology of the skin cannot be understood until the student has a very comprehensive knowledge of the pathology of the glands of the body, but especially of the large visceral glands, and the student is cautioned in this connection that whenever he is called to observe a grave skin condition, he must always have in mind that there is a correspondingly grave visceral skin condition, and act accordingly.

The paramount proposition in connection with the pathology of the skin for the student to remember is that, when the skin is abnormal it in ratio ceases to perform its depuratory function to the body, and in that sense becomes destructive by enveloping and keeping within the body toxins, which have no other means of

escape except through the other three depuratory channels, which in such conditions are usually deficient in conduct.

Skin abnormality, therefore, is always a very profound study for the student, not only because the conduct of the skin is so important in normal function, but because the skin in function is so closely connected with all other phases of pathology that its conduct is a subject of great diagnostic value.

AFFIRMATIVE PHASE

The affirmative phase of skin abnormality has in many instances already been disclosed, for in connection with all of the organs so far discussed, there has been general reference to the inflammation of the mucous and serous membrane. Therefore, all that was said in that connection is apropos of this discussion.

The steps, then, to consider, taken in their order are, occlusion of stimulus to the area, congestion in the area of occlusion, followed by inflammation and inflammatory catarrh. These various expressions represent all of the phases of the affirmative process.

Of course, it must be understood that many of the phases of skin abnormality that are incipiently affirmative, finally continue into the negative phase, and in that particular sense it is not important to designate them by names.

Generally speaking the phases of skin abnormality that represent the affirmative process are pimples, fever blister, eczema, ring-worm, favus, nettle-rash, erysipelas, itch, barber's itch, molluscum, impetigo, exthyma, pempigus, purigo, puritis, sweat rash, rupia, seborrhea.

To these there should also be added corns, bunions, and the incipient phases of leprosy.

Of course, the student will understand that all of the names just enumerated are only those given to fanciful differences, and actual differences in appearance of these processes as they occur in individuals, but he will understand that they are all phases of the inflammatory and inflammatory catarrhal processes of the skin, at least at their incipiency, and until they have become grave and chronic. Of course, it will be understood that several of the phases mentioned are only the outward appearance of a very profound, constitutional, glandular abnormality, and must be so considered. Lupus is one of these. So is that phase called molluscum.

Leprosy, as is well known, is classified as a skin disease, but the skin phases of that abnormality are but the outward symptoms of a profound, adverse, glandular process.

In this connection it is well to remember that there is no doubt that in its incipiency leprosy can be corrected by the proper and faithful application of the principles of Chiropractic to the case, as certainly and as easily as any other phase of abnormality.

In making the preceding statement, the author wants it understood that so far as he knows so-called leprosy has not come under the application of the principles of Chiropractic, and therefore, no specific demonstration can be cited, but it is the author's intention to personally make a demonstration in a case of leprosy at the first opportunity, and he fully believes that the result will be all that he expects.

It goes without saying that in the affirmative process

we have all of the peculiar changes in the color and relation of the elements composing the skin that have been observed, from jaundice, that accompanies spleen and liver abnormality, to the copperish-brown of so-called Addison's disease, and the piebald condition incident to abnormality of the suprarenals in connection with the liver and kidney, and indeed all other phases of discoloration.

There is also presented all the different changes in the thickness of the skin; swellings, and the peculiar changes in the subcutaneous tissues, and the structures resulting in that horrible distortion called elephantiasis.

NEGATIVE PHASE

The negative phase in skin abnormality is precisely identical with the negative phase anywhere.

The tissue conditions that began in congestion, inflammation and inflammatory catarrh, are succeeded to by exuding catarrh, by distension and by dilation, usually accompanied with pallor, flaccidity, and marked phases of discoloration.

Of course, in the negative phase the conduct of the skin has been more pronouncedly depleted, and therefore, a still greater burden is placed upon the other three depuratory channels, with the result that there is always a greater general retention of morbidity within the organism, and continuing intensity of all phases of abnormality, as well as those of the skin.

Practically all of the phases named as being incident, at their incipiency, to the affirmative process, may appear in chronic and graver conditions in the negative phase.

The phases therapeutically named, which indicate

the negative phase, in addition to those already referred to, are liver spots, fish skin, piebald skin, fatty tumors, tumors, subaceous tumors, dry teter, abnormal finger nails, and the advanced phases of bunions, corns, warts, and other fungus growths. Some of these phases require a little further discussion, and for that purpose similars will be discussed together.

For instance, dry teter, fish skin and abnormal finger nails are practically identical. The phases just mentioned occur as incident to chronic occlusion in which there is a lack of liquidity, accompanied by an elimination of toxins of a nature to render nerve terminals inanimate. This is especially true as to dry teter and fish skin. It will, of course, be understood that in these conditions there will be pronounced vaso-motor occlusion.

Abnormal finger nails are the direct symptoms of prolonged chronic occlusion of the nerves of the brachial plexus, peculiarly those which extend to the ends of the phalanges.

Abnormal finger nails have been declared by therapists to indicate tubercular conditions. They may, or may not, depending on where occlusion centers to cause tuberculosis. However, it must be admitted that incident to all lung abnormality, especially of the apices, the process is accompanied by abnormal finger nails because of marked occlusion at the brachial plexus. But it must also be remembered that abnormal finger nails occur as incident to many other phases of process, peculiarly motor reaction incident to orificial abnormality.

Piebald skin is a peculiar phase of abnormality, which occurs as incident to a lack of distribution of pigment,

and is, therefore, a symptom that the suprarenal glands are not acting normally, which, of course, never occurs by itself, but occurs as incident to general glandular abnormality of a grave type.

Bunions grow as incident to rheumatoid conditions in certain joints, peculiarly the metatarso-phalangeal joint of the great toe. Bunions never occur except in those who have grave kidney abnormality.

Corns are a negative phase of skin condition, subsequent to an inflammatory condition, in which a proliferation of skin cells of a giant character are produced. Of course, it must be understood that so long as the corn remains, there is, accompanying the negative phase as an incident, an affirmative inflammatory one.

Itch, barber's itch and ringworm may be present in the negative phase, and are always the result of an attack of germs of prey. They may only be removed, therefore, by an external application to them which will destroy the germ life, and this for the reason that it is impossible to apply the principles of Chiropractic to them since they are outside of the functional process of the body.

The student should understand in this connection that the statement made in the last paragraph is true of all other attacks by germs of prey, such as vermin of one type or another, or of those germs of prey which attack the skin, or deeper tissues of the body.

Many other phases of the affirmative and negative process of skin abnormality will be taken up in connection with other subjects, and particularly incident to venereal abnormality. Orificial abnormality, as it affects the skin, has been discussed.

Relating to remove skin abnormality must, of course, be addressed to release of nerves ramifying the area involved. However, it must be stated in this connection that in a general way in order to remove skin abnormality address must be incidentally to release nerves to the large gland areas. Usually the paramount of these are the kidneys, suprarenal glands, spleen and liver. However, many other skin areas come in for consideration, but they will be more specifically referred to in connection with the organs necessarily discussed with them.

CHAPTER XXV

ABNORMALITY—URINARY SYSTEM

Discussion of the Affirmative and Negative Phases

The organs of the urinary system constitute one of the four principal depuratory channels of the organism.

It would be impossible to go into all of the details and ramifications of the effects of abnormality of this system in a way to be of value to the student. A complete discussion of the pathology of the urinary system would be very nearly a discussion of all the phases of abnormality which occur, but would especially require a discussion of all phases of fever, practically all pathological conditions in which there is pain and in which there is irregularity of muscular function. The discussion here, therefore, will be more particularly directed to the actual pathology of the organs involved, with certain reference to other phases of reaction.

The therapeutic world knows very little about urinary abnormality until it becomes so grave and general in its nature as to demand attention and to be nearly, if not quite, impossible of correction.

It is well known that no deviation from normal performance of the urinary organs can occur without the tissues involved in that performance being proportionately abnormal, and therefore, the slightest deviation in function proves organic abnormality to exist.

Occlusion of stimulus here, as elsewhere, causes abnormal tissue conditions, presenting adverse processes.

THE AFFIRMATIVE PHASE

Congestion occurs in any area in the urinary tract to which the nerves are occluded. Congestion, then, may occur in the kidney, in the pelvis of the kidney, in the ureter, in the bladder, or in the urethra. Almost at once following congestion there is another marked phase of conduct which must be discussed.

INFLAMMATION

Inflammation occurs in the affirmative phase in an area in which congestion has occurred, resulting from irritation, superinduced by congestion, so that, by motor-reaction, nerve stimulus is concentrated from a wider area, resulting in an increased friction and elevated temperature.

It will be seen that inflammation may occur at any place in the urinary tract, but, of course, its symptoms are more marked when it occurs in the substance of the kidney, and much more hidden when it occurs in the pelvis of the kidney, the ureter or the urinary bladder, becoming more marked if it should occur in the urethra, especially in the prostatic part of it in the male.

The pronounced symptoms of congestion and inflammation of the urinary organs result in a general rise of temperature, but, of course, if the inflammation is of the kidneys it will not be difficult to discover the excessive heat of those organs by palpation of the areas dorsal to them.

There is also a disturbed function of the urinary tract concomitant with incipient inflammation of a marked nature. This is usually presented by a lessening of the urinary discharge. If the inflammation is sudden and

high, the small amount of urine passed will be clear, and contain no solids, showing that the kidneys are not performing their depuratory functions. In later stages, even in the affirmative process the slight discharge of urine may be loaded with gases, so as to be deeply colored.

INFLAMMATORY CATARRH

The situation stated in the last paragraph is incident to inflammatory catarrh of the tubes of the urinary system, and the symptoms here are usually of a nature already stated, but the urine discharged may be accompanied by mucous which has partly undergone disintegration from the effect of being suspended in the urine. Usually the inflammatory process is of short duration and of course quickly disappears under the application of the principles of Chiropractic.

SUPPRESSION

Frequently, incident to the inflammatory catarrh, which occurs as incident and subsequent to congestion and inflammation especially of the kidney but also of the entire tubes of the urinary tract, there is suppression of the urine.

The suppression just referred to, results because of accumulation of the mucous relative to the urethral orifice in the trigone of the bladder preventing the liquid from passing.

In cases of the inflammatory type of the urinary organs, suppression of the urine will be almost conclusive proof of the accumulation of such mucous in the bladder, and indicates that careful irrigation, to remove the mucous, should be performed.

Irrigation of the bladder is accomplished by the use of a very small catheter, not large enough to fill the urethra, using water of about blood temperature, and allowing a gentle and continuous stream to flow into the bladder, and at the same time flow out, around the catheter. By this means the mucous can generally be entirely removed, permitting free urination in the normal way.

URINALYSIS

Therapists have contended very much for the usefulness of what they call urinalysis. There are two very important sides to this proposition. The therapeutic claim is that by an urinalysis they are able to discover what phase of abnormal function is taking place in and through the kidneys.

While the author does not intend to wholly deny the force of this proposition, still he feels it necessary to call attention to the fact that an urinalysis proves that depuration is being accomplished, of no matter what character, from the kidneys.

The student, however, is definitely cautioned that an urinalysis, which reveals nothing abnormal, may be the profoundest proof of great abnormality for, of course, if the kidneys are so prostrated as to their functions that they are unable to depurate the substances, an urinalysis cannot be relied upon to disclose the exact situation. Indeed, it is unreliable for any purpose, because it is a well-known fact that practically any depuratory substance may, under certain accommodative phases, be depurated through the kidneys, the lungs, or skin.

In this view of the situation, to find the kidneys depurating a substance which they ordinarily should not, may only be proof of the virility of the kidneys, and that they are undergoing an accommodative function to other organs, which are incompetent.

Urinalysis is of no value to the Chiropractor, for he has other and better means for determining the degree of abnormality of the kidney. He is able to determine the exact amount of occlusion of the nerves to the kidney, and the incidental symptoms expressed from occlusion, and therefore, is in position to properly assess abnormality of the kidneys, or any other part of the tubes of the urinary system, and does not need other measures.

THE NEGATIVE PHASE

In the tissues of the organs of urinary depuration, the negative phase occurs just as it occurs elsewhere. After having passed through the period of primary occlusion—congestion, inflammation and inflammatory catarrh—the tissues have finally arrived at the negative phase.

The tissues of the area effected, or the whole tract if it should be involved, will have become distended, flaccid, and invirile. There will be great retention of morbidity, incident to profoundly increased disintegration, and lessened assimilation. The symptom declaring this situation is represented in a pathologic process.

EXUDING CATARRH

The symptom manifested by exuding catarrh declares that the negative phase of tissue condition has

been reached. Incident to exuding catarrh, in the negative phase of urinary difficulty, there is frequently much disintegration of kidney structure, and solid discharges from the mucous lining of the tubes.

Frequently in such conditions there will be passages of slime of a milky appearance from the bladder. Occasionally in a case there will be a rather excessive discharge of this type. That is especially true if the pelvis of the kidney is particularly involved. If the tubes from the kidneys out are not greatly involved, but the kidney substance itself is, then there will be accumulations in the urine that will look much like sand. An exuding catarrh of this character and gravity indicates that the kidneys are in a rather grave situation, and should have most careful attention.

DILATION

As incident to the process of exuding catarrh there frequently is in the tissues of the kidney, pelvis of the kidney, ureters and bladder, one or all, a marked dilation. Where the kidneys are profoundly involved by themselves, the dilation referred to frequently results in the kidney increasing very much in size, sometimes becoming twice the normal size.

Such conditions are called dropsy of the kidneys, therapeutically, and the method is to remove the kidney. However, this is wholly unadvised usually, for by proper attention to diet, and application of the principles of Chiropractic, the trouble can be wholly overcome, and the kidneys restored to their normal consistence, size and function.

GRAVEL

Incident to the exuding catarrhal phase, frequently a drop of exudate, or sometimes a drop of blood that has escaped, forms the basis of an accumulation and precipitation of the solids of urine, resulting in the formation of a stone-like substance in the pelvis of the kidney which is called gravel. Usually before these have attained to a size impossible to pass through the ureter, they descend into the bladder. Sometimes, however, a gravel assumes such size that it will not pass.

Usually restoration of the kidney function will serve to deluge the forming gravel in the pelvis of the kidney with normal urine, thus disintegrating it so that it will pass.

In some very aggravated cases, the gravel will not disintegrate, and is too large to pass, and so completely fills the pelvis of the kidney that it is necessary to remove it. However, this is not by any means frequent.

STONE IN THE BLADDER

Stone in the bladder is an adverse process that usually succeeds to gravel, and is a condition in which the gravel has descended through the ureter into the bladder.

However, stone in the bladder may occur in the urinary bladder itself, when there is a tendency to precipitation of calcareous and other substances ordinarily suspended in urine.

Relating to remove occlusion of stimulus to the organs of the urinary system is primarily addressed to the twelfth, eleventh and tenth thoracic nerve trunks. Of course, the address must be frequently performed in different order than that named, the order stated

being the usual situation. Incident to the release of nerve stimulus at the locations mentioned; address must also be made to the lumbar areas from which nerves extend to the prostatic region, and to the pudic trunks of the male, and the ovaries and uterus of the female.

CHAPTER XXVI

VENEREAL ABNORMALITY

Leucorrhea—Gonorrhea—Gleet

Incident to the many changes of abnormal tissue condition found in the procreative apparatus, ordinarily called the sex organs, there are three phases that stand out with peculiar prominence, because of the typical and individual process in each.

Notwithstanding the remarkable deviations in the symptoms in each of these characteristic tissue processes, the phases of expression have been named by the therapeutic world as being gonorrhea, venereal ulcer, and syphilis.

The first of these processes will be discussed in this chapter. Venereal ulcer and syphilis will be discussed in the following chapter. From the fact that the animals that are wild by nature, and have not been domesticated, do not present phases of abnormality called venereal disease, it is reasonable to conclude that there was a time when the human family was not the subject of these adverse phases.

However, it must be admitted that history fails to record the period of the inception of these phases of abnormality. The human family has been subject to the adverse tissue conditions called venereal disease so long as there is any authentic record relative thereto.

There are other facts which tend to sustain the conclusion that man, before he entered into the evolu-

tionary process called civilization, was not subject to these phases of abnormality. These evidences are found in the fact that savage men of no race or clime have ever been found presenting any such phase of adverse tissue condition; and it is also found to be true that so soon as savage people mingle with so-called civilized people, and adopt, at least to some extent, the habits of the civilized, they become subject to this phase of abnormality.

It is also true that wild animals that have not been contaminated by civilized or domestic conditions, can not be inoculated in such manner as to produce venereal disease, and it is only possible to produce the process in domesticated animals most nearly approaching the human type, such as the ape, etc.

Be all these things as they may, we are confronted with the terrible fact that the human family is at this time, and has been for many centuries, subject to these deteriorative processes that are the most pronounced " thorns upon our rose of life," and are probably doing the human family the greatest injury of any phase of abnormality incident to the whole social relationship.

If it is true that there was a time when the human family did not present these phases of adverse process called venereal disease, then the first case of that character that presented this phase was undoubtedly the result of a peculiar and characteristic physical degeneracy, which grew out of abnormal sex relationship and sex emotion, incident to incipient civilization.

It seems overwhelmingly clear that such was the condition, and such was the incipiency of the process. A careful and impersonal view of the whole field points

unerringly to the fact that humanity degenerated sexually to the production of the phases of abnormality incident to venereal disease.

It is clear that this degeneracy is one of the severest burdens the human family bears today. The influence of venereal disease is retarding evolution, and has increased the production of hereditary tendencies, and congenital tissue conditions that will require much time and great care for complete eradication.

Venereal abnormality is much more common than is generally supposed. There are many persons who, during their experience do not present the active phases of this abnormal process, because fortunately they have avoided inoculation, but at this time there are few, if any, persons wholly relieved from the adverse influences of tissue degeneracy directly produced by these adverse processes by direct heredity or collateral tissue tendency.

Proud society attempts to cover these gruesome truths, but the truth is that the influences incident to general venereal abnormality form an adverse tissue basis, which, taken in connection with other adverse tissue influences produces multitudinous phases of grave tissue abnormality, prime among which is so-called paralysis, consumption, tuberculosis, locomotor ataxia, insanity, and so on, that sweep from usefulness into untimely graves unnumbered thousands each year in the so-called civilized nations of the world.

One of the marked phases of tissue degeneracy that prepared the way for venereal abnormality is the anomalous sex organs already discussed in "Orificial Abnormality," Chapter III, to which the student is here definitely referred.

Orificial abnormality works in the production of venereal possibility like a two-edged sword. That is, venereal abnormality is a strong factor in the production of sex orifice anomaly, and sex orifice anomaly is a marked producing phase in the inoculation and production of venereal abnormality.

LEUCORRHEA

Venereal abnormality of any phase would be impossible if there was not a tissue degeneracy preceding the specific introduction of the virus, for otherwise the healthy structures would destroy the effect of the virus, and eliminate it from the body.

The adverse tissue condition necessary for the incipiency of venereal abnormality, therefore is occlusion of nerve stimulus, congestion, inflammation and inflammatory catarrh, which has become sufficiently chronic to render the membranous surface at the point of contact open to endosmosis of venereal virus.

The chronic inflammatory, and still more chronic exuding catarrh in the female has been called leucorrhea while in the male it has been called urethral catarrh. The processes are precisely identical. Of course, it is not necessary that these phases of adverse processes shall be of sufficent gravity to be called leucorrhea or urethral catarrh by the therapeutic means of examination, in order to present a recipient condition to venereal inoculation, but the adverse tissue conditions must be present.

Purulent leucorrhea, incident to intercourse, was undoubtedly the phase through which the incipiency of venereal abnormality occurred. It is not erroneous to

suppose that this character of exudation was perhaps produced, but in any event increased, during that period of human history where women were not consulted as to the use of their bodies, but were the prey of men who desired them. The revulsion to sex relation thus imposed would have a marked tendency to produce catarrhal exudates, which, by lack of instant care, would readily become purulent leucorrhea.

GONORRHEA

This phase of venereal abnormality is commonly called "clap." It is an inflammation of the mucous lining of the sex organs of both the male and female, together with their subjacent tissue. In the male gonorrhea particularly affects the tissues of the urethra and the adjacent spongy body of the penis, sometimes including the prostate gland and even the urinary bladder.

In the female the inflammation may be of the mucous lining of the urethra, the vagina, and may extend into the uterus, and in rare instances into the Fallopian tubes.

In either the male or female, in from twelve to thirty-six hours after inoculation there is exuded an excessive mucous discharge, which at first is somewhat clear, but almost at once becomes cream colored, and within a few hours or days, in aggravated cases, becomes a yellowish green, or moss-green tint.

Therapists have called this discharge gonorrheal pus. By the time it has become really pus it contains a peculiar, small germ called a gonococcus or micrococcus gonorrhea. This germ is a scavenger, and is incident to the retained morbidity which accompanies the catarrhal tissue condition.

As has been before hinted, the origin of "clap" is more ancient than human history. In society, as at present organized, it is transmitted by inoculation, and usually by unclean sexual intercourse. However, it is possible for inoculation to take place by bringing into contact the fresh pus of gonorrhea with a recipient mucous surface in such manner as to result in endosmosis.

This type of abnormality has been known to be communicated from one female to another from using the same towel after a bath. But from this fact it must not be thought that inoculation of gonorrhea is so easy. The attempt to hide the means by which this phase of abnormality is transmitted has resulted in much falsification and novelty, and, therefore, has resulted in the human family having a very erroneous conception as to that matter. It must be stated in this connection that gonorrhea is almost universally transmitted by means of unclean sexual intercourse.

As has been before stated, it is not necessary that the female shall be undergoing the process of gonorrhea in order to inoculate the male. The woman suffering from purulent leucorrhea may sometimes inoculate the male with virus of such nature as to produce the typical phase called gonorrhea in him.

The author has observed cases in which gonorrhea has been produced in the husband by inoculation from the wife who was subject to a purulent leucorrhea. He was brought into cognizance of several cases of this kind during the period of his experience as a lawyer, and took pains to investigate to complete satisfaction.

So-called gonorrhea is a simple catarrh, and its gravity has been very largely overlooked. Ordinarily in

the female it abates in a few days if the patient keeps the parts clean, and in position to depurate without any serious adverse symptom. If, however, the pus is forced up the urethra into the bladder, or up the vagina into the uterus, the process may become very complex and dangerous, and if the pus should find its way into the Fallopian tubes, or through them, the situation becomes very grave. For, if the pus is forced into the abdominal cavity, peritonitis is almost sure to follow, which may result in death. However, there is no need of this result if the case has proper care from its incipiency.

In the male, the process of gonorrhea is very different, the urethra being a long and constricted tube of from seven to nine or more inches. When swollen it does not furnish an easy means of depuration and it is necessary that the bladder shall be emptied by passing urine entirely through this tube, which in the adverse catarrhal process is not only of a very painful nature, but a very irritating one.

In connection with the length and small lumen of the urethra, it must also be remembered that the sinus pocularis is situated in the floor of the prostatic portion of that tube, and contains the orifices of the ejaculatory ducts, and on that account there is considerable danger of pus entering these ducts and inoculating the tissues of the prostate, seminal vesicles, and ducts.

In connection with what has just been stated, it must also be remembered that the orifice of the bladder is situated just above the sinus pocularis, and there is danger of pus passing into the bladder.

It will be seen that by these means prostatic inflammation can be produced, or even inflammation

of the seminal vesicles, which is almost sure to bring about the complication of inflammation of the testes on one or both sides, and, of course, pus entering the bladder would produce inflammation of the bladder.

The phases just mentioned seldom occur, and need never occur if proper attention is given to the abnormality at its inception. The wall of the urethra is thin, and the tissue adjacent is loose areolar and lymphoid. During the inflammation period there is often pocketing through the urethral walls into these adjacent tissues, in which event pus may accumulate and pass down between the layers of adjacent muscles, even into the femoral canal of the thighs.

In this phase of process, pus sometimes escapes to the surface at the sides of the transversus perinei muscles, and even back at the sides of the anus. Such irritations produce grave motor reaction in other areas with widespread occlusion, which therapeutists call gonorrheal rheumatism.

The same character of injury as described in the last paragraph affecting the male, may occur in the female from the pocketing of pus laterally through the walls of the vagina, in which event, she also may present what is called gonorrheal rheumatism.

The care of gonorrhea is simple and common sense. The parts must be kept clean, taking the utmost precaution not to further spread the pus, and therefore inoculation. The patient should, therefore, be treated exactly as though he, or she, were ill; should be put to bed and kept very quiet; should have no food of any kind, but should be induced to drink plenty of water, and should be related from one to three times a day in the active phase.

Sometimes in order to keep the parts cleansed, especially in the male, it will be necessary to use a syringe with some cleansing liquid, usually plain, warm water of blood temperature, being careful on introducing the douche for cleansing purposes, not to let the pus go on beyond its present extent.

Under proper care usually, if the case is taken at its very incipiency, the active symptoms will disappear in from five to ten days. Of course, in cases that have been neglected, or treated medically, it may last a much longer time.

Relating to remove gonorrhea primarily consists in securing correction at the second lumbar nerve trunk areas. In addition thereto usually attention to release of kidney nerves is necessary, and practically always release at the fourth lumbar nerve area is necessary, to remove occlusion from the pudic nerve trunks.

Incident to this correction, release of the sciatic ligaments and gluteus maximus muscles, as they apply themselves to the sciatic nerve trunks, and pudic trunks, are necessary.

GLEET

Gleet is a dropsical phase of gonorrhea. It only occurs where occlusion has been allowed to extend until the tissues involved have become so degenerated that lymph escapes through them by exosmosis.

The phase of abnormality called gleet never occurs except when the case has not received proper attention at its incipiency, and therefore, has passed through all of the inflammatory and negative phases, until this most aggravated dropsical one.

It goes without saying that gleet is a very depleting process, and should have the most exacting and careful attention. The patient should be kept very quietly in bed, and be fed carefully selected and nutritious food temperately and should have Chiropractic correction at least once a day. He should not be permitted to use any exciters, such as tobacco, and intoxicants, and should not be allowed to undergo any kind of sexual excitation.

Relating to remove the adverse process called gleet should be chiefly constitutional in its nature; for by the time this phase of abnormality has been reached, there will be complete and general debility. However, the primary areas of attention are the same as those in gonorrhea, and as to the other locations, the Chiropractor will have to determine them by his diagnosis.

CHAPTER XXVII

VENEREAL ABNORMALITY

Syphilis—Venereal Ulcer

The introductory statements made in the preceding chapter are all very apropos of what must be stated here, and therefore, nothing further need be said in a general way of the social aspects of the phases of abnormality to be discussed in this chapter, except as they present themselves respectively.

As an introductory statement, however, it should be said that with regard to the phases of abnormality to be discussed herein society at large has a great many erroneous conceptions.

The most pronounced of these conceptions seem to be the intolerance and lack of sympathy exercised in the attitude toward the unfortunates who are overtaken by these adverse processes. Society confuses the unfortunate victims with the loathsome malady, and hates one as much as the other.

Society seems to feel toward the victim of syphilis, or venereal ulcer, that he is very unworthy, and guilty of a heinous form of dereliction, when a majority of human beings are guilty of the same acts by which he made his downfall; the difference being that they were not so unfortunate.

SYPHILIS

Syphilis is confined wholly to the human race, and particularly to civilized or domestic man.

Therapy claims to have inoculated some of the higher orders of apes with pus in such manner as to secure the typical reaction. This proposition, however, is still in much doubt, and even if it has been accomplished, it has been accomplished in the ape degenerated by civilized modes of living.

There appears in the virus of syphilis, at a certain stage of the reaction, a germ called the treponema pallidum or spirochaeta pallida, an organism so small as to be seen only by the use of very great magnification.

The therapeutic world thinks that the treponema pallidum is the cause of syphilis, because this organism is found so frequently in the syphilitic pus. It is perfectly apparent that the disintegrating morbidity produces the germs, and is as fully conclusive that the germs do not produce the pus.

The process called syphilis occurs in all parts of the civilized world, and no phase of civilized society escapes it.

It is a phase of abnormality that presents its characteristic symptoms more particularly through the lymph system, which is the same as saying that the injury is generally to the minuter parts of the body beyond the blood capillaries, or in the areas of assimilation and depuration.

The adverse tissue process called syphilis is divided for discussion into three phases called primary, secondary and tertiary. These phases will be discussed in this order, but it must be remembered that each phase merges into the next succeeding, so that there is no well-defined line of demarcation between them, and therefore, these phases only constitute the typical,

adverse process, which, in the fullest sense is but one.

The first phase is that in which the symptoms of the adverse process first present themselves.

In order that the student may understand this phase, he must know that this form of typical reaction to poisoning can only occur by the process of inoculation, or in other words, syphilis, so-called, can only be transmitted from one to another by the process of inoculation.

Inoculation in the sense here discussed is in all respects a vaccination accomplished by endosmosing the active pus or virus from a person undergoing the active phase of syphilis into a recipient lymph area of another.

The student must not make the mistake of arriving at the conclusion that in order that this character of vaccination can take place that actual scarification must first be made, but he is to understand that the surface, mucous or otherwise, must be in an analogous state of scarification. That is, its integrity must be injured to the extent that it cannot resist the encroachments of the pus or virus.

Since the adverse process called syphilis is transmitted through the process of vaccination by syphilitic virus, which, like any vaccination that "takes," is proof that the individual vaccinated is abnormal. It is well known that undergoing this phase of abnormality does not protect against a subsequent inoculation, and in this respect the entire process is in alignment with vaccination in general.

Therapists, to meet with the idiosyncrasies of society, have classified transmission of syphilitic pus as being accomplished in two ways; what they call *syphilis inno-*

centum, and *syphilis by coitus*. It is not the intention of the author to say that syphilitic pus is never transmitted from one individual to another, producing the peculiar phases of typical reaction, in ways and means wholly aside from sex relation, for he knows that occasionally such transmission occurs.

For instance, doctors have been inoculated through abrasions in the hand in performing their work. Inoculation has occurred by an abrasion on the lip in a kiss, and so on, but it must be remembered that syphilitic virus is nevertheless very seldom conveyed from one individual to another by these means.

There is much said upon this subject, and much fear of accidental inoculation is a part of folk lore. The stories of being inoculated by the same towel, pipe, or drinking vessel that another has used, will practically always be found, upon investigation, to have no basis in fact, but to be stories told for the purpose of hiding social dereliction.

Inoculation in the transmission of syphilitic virus is practically always accomplished as incident to sexual intercourse. It must not be thought that syphilitic virus is easily inoculated. Inoculation is just as difficult as vaccination; no more and no less so, and it must be remembered that this phase of abnormality can only be caused by the transmission and inoculation during the active pus forming period of so-called syphilis.

The first proof of inoculation that occurs is that of congestion and inflammation of the area where the inoculation has occurred, which inflammation quickly subsides, because the nerve endings and the

tissues of the area become inanimate, but remain in a strange state of chemical preservation, and between this center and the animate tissue a dense, hard ring forms. This is called the Hunterian or *hard chancre*, and is what the therapeutists call "the initial lesion."

The hard chancre is a peculiar and characteristic sore, and its appearance is absolute proof that inoculation of syphilitic virus has taken place. It is a diagnostic symptom of paramount value, and the practitioner should become so profoundly acquainted with it as to render a mistake as to it impossible, and once a typical chancre has been seen and felt, the diagnostician need never be in doubt if the sore is where he can feel it.

The chancre, or sore, is about the diameter of a United States dime, and is generally nearly circular with a considerable thickening of the skin, resulting in an abrupt, raised, red, hard margin, that feels like gristle, and presents the same sense in touch as the so-called "rooter" of a hog's snout.

The hard rim of the chancre just described is red at the outer circumference, but pallid on the inside wall, and has an umbilicated center, occupied by a dirty gray, pus-like substance, which has already been referred to as the inanimate tissue elements in the area of the inoculated virus.

The remarkable part of the hard chancre is that it is not sensitive. There is no sense of pain or uneasiness upon its being handled. It is numb, or feelingless. It is really dead, but, as has been said, in a peculiar state of preservation.

Immediately preceding the occurrence of the chancre

there are constitutional symptoms, beginning with chill and slight fever. However, the most profound symptom is that of a sense on the part of the patient of being profoundly abnormal; a sense of being wholly undone. However, he is able to go about, and only experiences lassitude, weakness, and sometimes slight nausea.

The symptoms stated, last but for a short time, for as soon as the chancre appears, these symptoms disappear. At about this time it will be observed that the lymph glands in the immediate area of the chancre are swollen and hard, but they are not painful, and there is no general sense of uneasiness accompanying the phenomenon.

The chancre always occurs at the point of inoculation, no matter where that may occur. If the pus was inoculated by the process of sexual intercourse in the male, the area usually will be around the margin of the prepuce, or frenum of the penis, while in the female it may be at the labia minora relative to the clitoris, or at any area along the vaginal tube, and, of course, may occur anywhere in the tissues of the vulva.

If the chancre as described herein is on the sex organs, the inguinal lymph glands will be enlarged and hard. They will be slightly painful upon heavy pressure, but otherwise occasion no sense of uneasiness. From the time of inoculation to the complete presentation of the chancre requires from thirty-six hours to several days, and so soon as the chancre is fully presented, the general symptoms subside. The lymph glands, however, will remain swollen and hard, and the chancre will remain without any changes whatever for a considerable period of time.

During this period of apparent quiescense, which really is a general period of lymph inoculation of the whole organism, there will be a tendency to soreness in the muscles and tissues of the body upon the same being used, or if the person is heated and cools quickly.

The second phase becomes manifest usually after about seven to twelve weeks from the formation of the chancre.

This phase is characterized by swelling of the lymph glands in various parts of the body, but especially those of the groin, if the sore is at the sexual organs, or if elsewhere, the lymph glands of that area.

Swelling of the lymph glands, and incidentally those of the skull, and in the vicinity of sutures in the bones, will be accompanied by chill, succeeded to by fever, usually of an intermediate type, but sometimes rising to a considerable height, and occasionally producing delirium.

The chill and fever in this phase are very much like that incident to measles, and after a few hours of fever a rash breaks out upon the skin, especially upon that part of the body ramified by nerves from twelfth, eleventh and tenth thoracic trunks, which usually extends over the whole trunk, and sometimes to the face also.

As in measles, so here, when the rash has fully appeared the temperature rapidly declines, and soon returns to the normal. The syphilitic rash very closely resembles that of measles except that the spots are larger, and of a more dirty, rusty, red color.

Concomitant with the rash eruption there exudes from the skin a noxious odor, very similar to that from dirty iron rust, which is very repulsive, and once smelled is never forgotten.

The syphilitic rash usually remains for several weeks, when it begins to gradually fade, and finally wholly disappears, but almost always leaves permanent scars, and sometimes these may be quite marked, or even pustuled.

The most remarkable symptom that occurs is that upon the appearance of the rash, the original sore, or chancre, which, from its first development up to this time has remained substantially unchanged, begins to heal rapidly, and within a period varying from six weeks to four months it will have entirely disappeared, except a big, white scar, which may be called the globus pallidum, which will always remain, and will always be proof positive to the expert diagnostician that the individual has undergone so-called syphilis.

By the time the chancre is completely healed, the rash will have entirely disappeared, except for the permanent scar tissues that may occur as incident to it, which will remain permanently.

The third phase begins from six to eight months from the appearance of the primary sore. It is characterized by the presence of a chemical compound called gumma that, when it first forms is soft, producing lumps or bumps under the skin relative to aggregations of nerve ganglia and lymph nodes.

Gumma also precipitates along the margins of bones, especially in interosseous positions relative to lymph glands, and nerve ganglia.

The gummatious accumulations just referred to most frequently occur along the interosseous margin of the tibia, and interosseous margin of the ulna. They may occur however, relative to the sympheses, and particularly the sutures of the skull.

If upon the precipitation of gumma in any such areas as described, it is not quickly disseminated, it hardens and becomes very resistant, and feels like gristle or bone, and when once hardened, it is almost impossible to remove.

It must be remembered that the phase of process under discussion acts particularly through the lymph areas of the body, and that the deposit and formation of these gummatious nodules is the most damaging fact, because they frequently impinge upon nerve trunks, nerve ganglia and plexuses to complete occlusion, and in any event to great interference.

The most profound injury from solidifying gumma occurs incident to the skull relative to the sutures, in such manner as to impinge upon nerve trunks at the point of exit from the foramina, and in such locations as to impinge upon the brain substance in certain areas. It will be readily understood that there can be no more fruitful source of insanity, paralysis, locomotor ataxia, and all of the other degenerative phases of abnormality than gummatious accumulations within the skull cavity, so placed as to impinge directly upon cortical areas.

The author believes that much will be done for cases in which such accumulations have occurred, that can not be reached by the simple application of the principles of Chiropractic, through and by means of an intelligent and judiciously applied surgery.

The phase under discussion in the most favorable case, lasts from one and a half to two years, but in the majority of cases there are latent symptoms which may occur for years, and in some cases for the remainder of the person's life.

It must be understood that the discussion of syphilis up to this point has been from the standpoint of its having received no attention.

If from the outset it was treated medically, many other adverse symptoms, not here stated will have occurred, and if it was treated by the use of mercury, the tissue injury accomplished by the time the third phase has been reached will have aggravated gummatious tendencies and tissue degeneration, so that complete recovery will be doubtful if not impossible.

It has been fully demonstrated that the injury done to the human family through medical treatment of syphilis, has exceeded the injury that would have resulted from that phase of abnormality if it had never received any treatment of any kind.

Relating to remove the process called syphilis is primarily to remove occlusion from the nerves to the location of the primary sore.

If the chancre is on the sex organs, relating will be to remove the occlusion from nerves extending through the second and first lumbar, and twelfth thoracic trunks.

However, when the constitutional symptoms manifest themselves, motor reaction and columnar constriction will be so intense that there will be occlusion at every movable foramen.

At this phase of the process it will be the duty of the Relator to break up constitutional constrictions as fast as they occur, and during the active period he will usually find it necessary to administer correction from two to four times daily.

Constrictions incident to this adverse tissue process

are peculiar in that they change about. For instance, in the morning the constriction may be greatest in the lumbar region, and in the afternoon greatest in the headward thoracic, at bed time greatest at the base of the skull and so on. These symptoms must be watched, and the constrictions broken up, for they tend to muscular and aponeurotic fixation and great injury.

If, from the time of the appearance of the chancre, this phase of abnormality receives the application of the principles of Chiropractic, the symptoms described in this chapter will only manifest themselves as types, and the patient will at no time be very gravely affected, and will, during the whole time, be able to be up and about, and no permanent injury will result from the accumulation of gumma.

The doctor should see to it that the patient lives upon a frugal diet of the simplest, nutritious food, in so far as possible making it a mono-diet, that is, one principal thing at a meal, and never to exceed three things at a meal. The patient should not be permitted to use tobacco or intoxicants, or any form of exciters, and should be induced to sleep regularly, and many more hours than usual; should exercise frequently and regularly in the open air, and should not be long upon the feet at any time, and should perform no work calculated to produce a heated condition. The clothing worn should be as light and open as possible, and in cold countries this must be made possible by comfortable housing and artificially produced heat.

About a year and three months to a year and a half after the first appearance, there will occur the period of emaciation, which must have careful attention. After

the subsidence of the febrile condition, and the healing of the chancre, three relatings a week will be sufficient until the symptoms indicate the period just referred to, when the patient should have the careful supervision of the doctor each day, for it is during the period of emaciation that gummatious accumulations are most likely to occur.

This period of emaciation lasts from six weeks to three or four months, after which, correction two or three times a week will be sufficient.

If the principles of Chiropractic are faithfully applied, and careful attention be given to the details as outlined, within two to four years every symptom of this phase of abnormality will have disappeared and every danger of transmission of adverse, hereditary tissue tendency will have disappeared.

VENEREAL ULCER

The virus of this phase of abnormality is communicated like that of so-called syphilis—by inoculation. The primary sore, is a *soft chancre*, which looks almost precisely like the hard chancre, but it presents none of the characteristic symptoms. It is soft, and sensitive to the touch. The venereal ulcer is a real sore, because the virus is not so virulent as to destroy nerve periphery.

Physicians frequently make the mistake of thinking that a soft chancre is a hard one, and, therefore, entirely mistake the process, and without any delay begin the mercurial treatment for syphilis, which soon produces all the symptoms of syphilis, and presents practically all of the depleting and destructive effects of that

adverse, tissue condition. Much and grave permanent injury has been done in this way.

There is another remarkable and distinctive feature between the soft chancre and the hard chancre. Pus may be taken from the soft chancre in its active state and as many vaccinations of the individual in different parts of the body may be accomplished as desired; while virus taken from the hard chancre and inoculated elsewhere in the body will present no apparent effects. This indicates the difference in virility of the toxin or virus.

Venereal ulcer may be transmitted in other ways, but the inoculation usually occurs through the medium of sexual intercourse.

When inoculation has occurred as incident to sexual intercourse, the inguinal lymph glands become markedly swollen, much more so than incident to hard chancre, and there is greater inflammation, the condition being very painful. Sometimes these glands swell so much as to show blue through the skin, when such swelling is called *bubo*, hence the name frequently given to this phase is that of bubo, or blue balls. Sometimes in the swollen lymph glands the tissues break down, and pus occurs, and in such cases it is good practice to have the area opened and thoroughly drained.

Under the administration of the principles of Chiropractic this phase of abnormality soon disappears permanently, and without leaving any scar.

Relating to remove occlusion causing venereal ulcer will be directed to the second and first lumbar trunks, and to the twelfth thoracic trunk. However, the necessity may go much wider than this; for, of course, if motor reaction is pronounced, there will be increased

occlusion at all subluxated areas of the vertebral column.

The patient should be put to bed and kept off his feet until swelling of the lymph glands has entirely subsided. He should be fed very sparingly, and it would be better if the administration were wholly of broths and soups. No tobacco or exciters should be used, and the patient should not be submitted to any sex excitation.

CHAPTER XXVIII

GLAND ABNORMALITY

Jaundice—Pellagra—Hook Worm

In order to understand gland abnormality in the full significance of that term, the student must have a very complete knowledge of the anatomy of glands.

In addition to a very comprehensive knowledge of the anatomy of glands he must also have a thorough conception of the liquid transportation systems of the organism.

In the last statement the plural of the word system is used, intending thereby to definitely point out the arterial system, and venous system, but particularly the capillary system in its relation with lymph transportation. If the student has a splendid conception of the exudation or extrusion of lymph or plasma from the blood through the winking valves of the capillaries, in what has been called, for the want of a better name, "the spaces of the body," he is prepared to advance into the phases of gland abnormality.

As prefatory to taking up a discussion of the details of gland abnormality the student must understand that analogously all glands of the body are lymphoid in their nature, and that really the principal difference that exists between glands is their size, and their peculiar organization.

The reference to organization in the last paragraph is intended to definitely refer, upon the one hand to ductile glands, and upon the other to ductless glands.

The principal difference between ductile glands and ductless glands, however, exists in that there is a better opportunity in a measure to understand the office or function of a ductile gland, than there is to understand the office or function of a ductless gland.

Too much emphasis must not be placed upon the thought of there being a difference between these two characters of glands, for aside from the ducts all glands are really ductless in function.

To illustrate what is meant by the statement in the last paragraph, consider, for instance, the liver, which is a ductile gland, in so far only as the bile is concerned, and in that restricted sense only after the bile has been collected into the tubules of elimination. Back of that, even as to bile, the liver is analogously a ductless gland; but as to all other gland functions, the liver is distinctly a ductless gland. By its other functions is meant the production of glycogen and uric acid.

It is a well-known fact that abnormality of the liver results in abnormality of the three known products, which it produces—bile, glycogen and uric acid, and it may be well understood in addition that all of the other influences which it normally exercises over the liquids of the body as a ductless gland are equally abnormal.

The spleen, as the largest ductless gland, is known to exercise a remarkable influence upon the lymph and blood generally. Just what characteristic changes the spleen produces are indeed problematical, but no physiologic fact is better known than that it does exercise a potently constructive chemical office in normal conditions, and equally destructive in abnormal conditions.

The kidneys are usually looked upon as excreters of urine, but it is known that back of the excretion of urine the kidneys are ductless glands, and exercise a remarkable influence upon the consistence of the lymph and blood passed through them.

It is surely well understood that when the kidneys are abnormal they return to the lymph, and through it to the blood, adverse chemistry, which exercises a marked influence upon assimilation. These adverse effects are prominently observed in all phases of kidney abnormality, but distinctly so in the phases which have received the names Bright's Disease and diabetes.

Much discussion has been lately indulged upon the subject of ductless glands, and many and remarkable things have been said with respect thereto.

There have been many persuasive editorials as to the adverse effects incident to abnormality of the suprarenals effecting pigmentation, and many other things. But, incidentally, there has been an entire dearth of thought with regard to the remarkably constructive value incident to the normal chemical formula excreted from the suprarenals in health. In like manner much discussion has been indulged as to abnormality of the thyroids, pituitary, and indeed all of the other small glands.

Some very bizarre ideas have been expressed with regard to the functioning of the pituitary gland; the last of which is that the pituitary gland is a very important nerve ganglion.

Aside from the fact that there is absolutely nothing to sustain the thought that the pituitary is a ganglion of any considerable importance, there is nothing to

indicate that it is even a gland of any great importance.

The situation of the pituitary indicates that it is perhaps of considerable value as an anchor to the very important and medial portion of the cerebrum, and, of course, is a safe means of extension and rearrangement of the nerves necessary to that immediate area. Hence it is connected with one of the most important nerve paths of the cerebrum. But that is not sufficient even to indicate that it is a ganglion of any unusual value, or that as a gland its function is remarkable.

The fact about the whole matter, with respect to the glands of the body, is that they are distributed throughout the entire organism in rich profusion, ranging in size all the way from the point of a cambric needle to the liver. There is no doubt that each and all of these glands exercise a stabulating or equilibrating office to the liquids of the body.

It cannot be doubted that the host of infinitesimal ductless glands scattered throughout the organism, exercise a remarkable influence upon the elaboration of the lymph that has passed through them incident to the process of assimilation, and that if tissues are to be normal the glands of the area must be normal, as a primary and incipient necessity.

It is also true that the chemistry of the liquids of the body, particularly the lymph, cannot be abnormal or change from normal consistence without soon rendering the glands through which it is transmitted abnormal; thus changing their excrescence to abnormal consistence.

There is no doubt that the primary effect of abnormal chemistry introduced into the body is upon the multitude of infinitesimal glands scattered through-

out the body, and in case of occlusion of stimulus to the area, the first adverse effect incident to the stasis is the chemical contamination of the glands of that area.

If students, who are of an investigating turn of mind, would direct attention along the line of action suggested in this chapter, much could be done toward solving the very intricate problems touched upon and pointed out.

With these brief, general observations, specific attention must be directed to a few individual themes.

JAUNDICE

Returning for the present to the liver, the student will remember that the elements for the production of bile are brought into that organ in the blood of the portal vein, and perhaps a small portion through the hepatic artery. The elements for the production of bile are almost entirely extruded as lymph through the winking valves of the portal capillaries into the so-called lymph spaces.

From the intermolecular spaces, the substances for the elaboration of bile in the normal are collected and directed by nerve stimulus into the biliary canaliculi, and finally into the biliary tubes; while the remaining lymph is carried back to the blood through lymph vessels.

Under certain phases of liver adverse function, occlusion is so grave to the tissue elements of the liver that bile elements are not collected and directed into the beginnings of the bile tubes, but are permitted to be carried out of the liver in the general lymph movement, and to be distributed through the transportation

systems, and precipitated in areas of stasis wherever the same exist.

The student of Chiropractic physiology will remember, in connection with the statement in the last paragraph, that in order that the tissues of the liver may be so abnormal, as just stated, the spleen will be abnormal also, and the chemistry sent to the liver from it will be of an abnormal compound.

In the condition of these two large glands, just described, it will be seen that these adverse chemistries will precipitate in areas of stasis in the deep and superficial tissues of the body, but that when they precipitate in subcutaneous areas, the marked change of color in those areas is easily observed.

In certain adverse conditions of the glands named, and of the skin, these subcutaneous deposits become so marked as to change the color of the skin to greenish-brown or greenish-yellow, and in certain localities of the skin almost to a moss-color.

Such changes in color incident to abnormal spleen and liver conduct are multitudinous, and it is only the very profound discoloration that has been called jaundice.

The symptoms of jaundice generally are those of profound lassitude, mental incapacity, dizziness, accompanied with nausea and vomiting. Generally the incipient greenish-yellow tinge begins in the conjunctiva of the eyes, and spreads to the face and body.

In such a situation the kidneys, if sufficiently strong, are depurating a very excessive amount of bile constituents, and, therefore, the urine is dark and smoky colored, with a pungent acid odor, and because little

or no bile is being passed into the intestine, the feces is very light-colored, sometimes almost chalk-like.

In jaundice the patient should be kept in bed in a warm, comfortable room; should have a relating every twelve hours. He should be induced to drink plenty of water, but to eat no solid food. If anything in the way of food is given, it should be vegetable broth containing no oil; for there is nothing to emulsify fats being discharged into the intestine, and this fact would strictly prohibit the use of oil, including milk, cream and butter.

Relating to remove jaundice, of course, primarily consists in correction of the liver and spleen areas; that is the fifth, sixth and seventh thoracic nerve trunk areas. But incidentally the thought must be directed to securing depuration, especially through the intestine, kidneys and skin. This will require a somewhat extended attention, and will at least require relating at kidney and intestinal areas.

PELLAGRA

Pellagra is a phase of glandular abnormality. It is caused by the irritation and motor reaction from the constant administration of a small quantity of a specific poison; abnormally affecting all of the infinitesimal glands that have been referred to in this chapter.

In the last few years it has been definitely ascertained and pointed out that the poison causing the phase of disease called pellagra is derived from water, which has passed through silica.

Dr. E. M. Perdue, of Kansas City, Missouri, has searched out and made a very extensive map of the

pellagrous areas in the United States, and has published a valuable work upon the subject, to which the student is definitely referred for a more extended discussion.

The symptoms of pellagra are indicated by a profound general debility, the incipient marked symptom of which is inflammation and reddening of the skin in the spring and fall, accompanied by the same character of inflammation of the mucous and serous linings of the body. This increases until finally there is a complete derangement of the whole vascular system, and, incidentally the glandular system, but especially the large digestive glands and the intestine.

Two things are essential to recover from pellagra: (1) that the patient shall cease drinking the silica-poisoned water, and shall substitute a lime-bearing water, or a water derived through limestone; and (2) release of occlusion of stimulus to the areas of trouble. Incidentally, in procuring these results, careful attention must be paid to the diet of the patient. Incident to this phase, the patient should have good, strained broths and soups, with regular administrations of lime water, which can be had by putting a teaspoonful of quick lime into a five gallon jar of water, stirring thoroughly and keeping in a cool place; giving the patient three glasses of this per day, at intervals, between the administration of broth, and about two and one half hours after the same has been taken.

Relating to remove pellagra, of course, will be primarily addressed to releasing the nerves to all of the large glands of the body, and in addition, the intestine and lungs. This is about all that can be said specifically, except that careful address must be given to release

of nerves to the areas of stasis, which the diagnostician will have no difficulty in localizing.

HOOK WORM

Hook worm is another grave and general, glandular abnormality. This phase of abnormality is called uncinaria duodenalis by the therapeutic world, and it is presumed to be caused by taking a peculiar worm or embryo with the drinking water, or taking such worms in through the feet from the earth.

It is presumed by therapy that worms taken through the skin of the feet go in the lymph and blood to the heart, thence to the lungs, and finally up through the air passages from the lungs into the pharynx, where they are swallowed, and in this manner get into the intestine. All that need be said for this route is that it is rather less direct than could be desired!

If it is true that these germs are taken in through the feet, and there is pretty good evidence to substantiate such fact, then it is much more certain that they reach the intestine by going directly in the arterial blood to the intestine and being extruded with the lymph in those areas.

The prime point is, that the first tissue contamination is the lymph glands of the body generally, and it is the depletion of these lymph glands that induces the peculiar anemia that accompanies this phase of abnormality; for it is demonstrably true that when hook worms are attached to the mucous linings of the intestines they are also found in the lymph tissues of the body generally.

Two things are essential for recovery from hook

worm: (1) that the patient shall have water and food that is not contaminated by hook worms, and (2) that he shall not expose his body to ground infected by them. If these two precautions are observed, with the assistance of proper correction to release nerve stimulus, the patient will make rapid recovery.

Relating in hook worm may be necessary at any area of the body, but, of course, will be primarily to release nerves to the great gland centers of the body, and incidentally to all of the four depuratory channels, and to any area affected by stasis.

CHAPTER XXIX

COMBINATION ABNORMALITY

Dyspepsia—Asthma—Hay Fever—Appendicitis—Epilepsy

There are a number of phases of abnormality which are really glandular, but because they involve the alimentary and respiratory systems, and incidentally the ductile and ductless gland systems, they have been grouped under the title of this chapter.

The particular details and incidental influences of adverse, glandular affection will be indicated under some title with respect to each phase.

DYSPEPSIA

Dyspepsia is a general class name given by therapists to a series of adverse functionings of the alimentary canal, generally referred to the stomach.

The word dyspepsia really means "not digestion," but is usually given the significance of bad or indifferent digestion, or, in other words, indigestion.

This phase of abnormality is an adverse tissue condition and process which applies to the stomach and small intestine. In discussing this subject, therapists practically always refer to the stomach, and it is the general conception that dyspepsia only applies to the stomach. However, in some general cases dyspepsia applies to the duodenum more than to the stomach, and in anything like aggravated cases the duodenum and stomach act adversely together.

It is a remarkable indictment of the civilized human family that dyspepsia has never been found among savage peoples, nor among animals of the jungle of the human type, nor yet among the wild animals.

Dyspepsia is a very common phase of abnormality in all of the civilized countries of the world. The fact that savages have never presented indigestion, forces upon our consciousness the fact that civilized methods of living are responsible for dyspepsia.

It is said that ninety per cent of civilized human beings are continually digging their graves with their teeth, while that statement, in its ultimate, is true, the fact is that a large majority of humans are going to premature graves as a result of wrong and excessive eating, but the principal difficulty is that they do not use their teeth.

Humanity has paid small attention to the fact that the baby's mouth and stomach are constructed differently, and operate to a different result than the adult. The baby has no teeth, and the salivary glands are just behind the lips, and his first food is milk, nursed and insalivated at the same time. In due course he grows teeth and changes the character of his stomach, and should never after have milk, but should eat like the babies of all such animals do, just what his parents eat.

Failure to observe the fact just stated has resulted in the human family not only breaking the clearly defined law, and drinking milk in adult life, but failure in that they eat a great deal of soft, pulpy and liquid foods, and this fact is responsible for at least eighty per cent of all cases of dyspepsia.

It, of course, goes without saying that dyspepsia is a chronic phase of abnormality, and could not exist except for the fact that the stomach has passed through all of the acute changes—congestion, inflammation, and catarrh—to some degree of dilation.

Grave, chronic cases of dyspepsia furnish the Chiropractor one of his most difficult problems, because the debilitated tissues of the stomach must have time to rejuvenate, and at the same time the patient either does, or thinks he must, take food, and his stomach is not in a condition that it can digest food properly, and, therefore, the whole problem is involved and difficult.

Usually, however, if the patient really wants to get well, and has confidence in his doctor, he can be induced to practice abstinence from food entirely, for a sufficient length of time to give the stomach that rest and advantage sufficient to start it upon the way to recovery.

The first step in caring for a case of dyspepsia is to lay down a rigid rule as to general conduct. That is, the patient must be required to leave off work in which there is exhaustive phases; so far as possible drop cares and worries; cease all phases of dissipation, such as smoking, drinking, dancing, and even the generally considered innocent amusement of tea parties, card parties, etc. He must adopt regular habits of sleep, out door exercise and must be influenced to look upon life cheerfully and not to take events, or his condition, too seriously.

It is also of the first necessity that he shall wholly forego all indulgence in sex excitement, and sex indulgence of any kind, and in connection with the rigid rule of conduct just stated, he must have a regular

food resumé established. In other words, if he fasts it must be done after a given manner, and if he is to take no particular character of food, the quantity and the times at which it is to be administered are to be strictly established. All of the various things that he must do for his body in the way of sponge baths, rubs, ventilation, etc., must be strictly laid down and followed.

The symptoms arising from dyspepsia are so many and varied as to be impossible of enumeration. The principal ones, however, are fermentation and production of gas, frequently accumulating and producing pain, radiated from the left feetward thorax downward and to the right, which the patient frequently construes to be pain in the heart. There is usually marked congestion in the eyeballs, and sometimes in the capsules of Tenon, accompanied by pain in the forepart of the head, with congestion around the base of the skull; tensed and fixed dorsal muscles of the neck, accompanied by cold, shivering sensations, and the feeling that the stomach has turned over or dropped down inert. Occasionally there are symptoms of nausea and vomiting.

It goes without saying that water is the patient's best food in this connection, because water contains a large portion of the necessary gases of the body. Milk and eggs are wholly forbidden, as are all other liquid foods after the patient's stomach or alimentary canal has recovered sufficiently to digest food.

At the start a bad, chronic case may be given strained broths as an analogous fast. But so soon as the stomach has recovered sufficient tone the food should be solid, should be light and easily digested, and must be thoroughly masticated. There should be but one food

taken at a meal, and the meals should be sufficiently wide apart to permit complete digestion and evacuation of the stomach or other portion of the alimentary tube, so as to give rest before other food is administered.

After a dyspeptic's stomach has begun to recover tone, the best foods to administer are such as whole wheat bread, properly French fried potatoes, thoroughly matured meats, not of the fine-grained variety, which excludes fish and all sea foods, but such, for instance, as beef steak, mutton, etc.

Usually it is indicated and advisable to leave butter entirely out, until the patient is well on the way to recovery, for the reason that butter is a very fine oil, and is practically indigestible in the dyspeptic's stomach.

It is not here intended to lay down what shall be ingested. The thought is peculiarly directed to advising what shall be prohibited, and to give a general idea of what shall be administered, leaving it to the resource of the doctor in charge to pick and select the things that will tend more nearly to the solution of the problem.

It must be explained that a large number of persons are dyspeptic as the result of motor reaction superinduced by irritation from anomalous sex orifices.

Of course, there are many others that are dyspeptic because of adverse eating.

The student is cautioned that it is impossible to permanently recover a case of dyspepsia in a person who presents an anomalous sex orifice, for in such case there will be motor reaction centering to the stomach, and, while palliation can be accomplished, it will never amount to anything more than palliation until the anomalous orifice is corrected.

Relating to remove dyspepsia will, of course, be primarily directed to a release of nerves at the stomach area, that is, the fourth and fifth pairs of thoracic trunks. However, since dyspepsia may be the result of abnormal tissue conditions in any part of the small intestine, correction may go very much more widely, the extent of which will be indicated in the other phases of abnormality discussed in this chapter.

ASTHMA

Asthma is a phase of abnormality that occurs as incident to the respiratory system, and usually occurs in the phreno-costal portions of the lungs. However, it must be remembered that this phase of abnormality is really superinduced by intestinal abnormality; for in connection with asthma there is always intestinal abnormality, liver abnormality, and phreno-costal lung abnormality.

The real situation resulting in what is called asthmatic paroxysms occurs as the result of a composite of both the affirmative and negative phases in the tissues of the lungs, in which the atria of the phreno-costal lungs are relaxed and distended, while the walls of the same tubes, and the tissues adjacent thereto are subjected to a precipitation of acid residues that cause them to undergo hypertonicity from any phase of excitation.

The asthmatic paroxysm usually occurs suddenly, in which there is constriction of the bronchioles in adjacent lung tissue, also profound constriction of the thoracic muscles, so that transfusing areas of the lungs are greatly reduced. On account of this fact inspiration becomes very difficult, for the air must be forced into

the tubes against the constricted and fixed tissues; it sometimes requiring three or four times as long as normal inspiration.

Because of the symptoms just stated, the patient undergoes a sense of suffocation, and the thoracic constriction results in occlusion of nerves to the heart and large vessels, resulting in the face becoming pale. and the extremities cold. Profound occlusion of stimulus to the lungs results in failure of aeration, resulting in the extremities and especially the face, becoming of a bluish tinge.

During the paroxysm of asthma, the skin is negative and cold, and yet at times there is considerable exudation of sweat. Incident to the sense of suffocation the face usually has an expression of distress, and in the very aggravated phases the patient appears like one about to expire. However, there is little danger of that result, and there is no case on record where one has died from a paroxysm of asthma.

The paroxysm may last from a few minutes to many hours, and even many days, but is usually of only a few hours duration. At the termination of the attack there is usually copious expectoration, the substance expectorated is ropy and thick, being the catarrhal exudation held back in the tissues adjacent to the bronchioles and atria during the paroxysm.

It must be understood that errors in diet, errors in sexual conduct, excessive emotion on any subject, unusual physical effort, and indeed, almost any character of excitement brings on attacks in those addicted to asthma. It must be explained in this connection that irritation from an anomalous sex orifice is very largely

responsible for the production of asthmatic conditions. This phase of abnormality may occur from other causes, but in a large per cent of cases the superinducing cause is an irritation from an anomalous orifice.

The statement in the last paragraph is made in view of the fact that asthmatic attacks frequently result from a prolapsed rectum, of such a nature that a portion of the rectum drops down into the grasp of the anal sphincters. Such a condition will produce an asthmatic effect almost instantly in those who have undergone the prolonged irritation from anomalous sex orifices that would not otherwise.

It should be well understood that a continuing irritation at the clitoris or glans penis definitely reacts through the visceral system to all of the glandular areas of the body, but particularly to the kidneys, to the spleen, liver and pancreas, to the stomach and to the brain. It must be remembered that it is occlusion of the stomach and liver nerves that causes the adverse tissue condition that prepares the way for asthmatic spasm in the phreno-costal lung.

The asthmatic patient should drink no intoxicating liquors, and should abstain from narcotics and exciters of all kinds. He should also undergo little or no sex excitation; should live upon a plain and simple diet, and the doctor should at once investigate the matter of his orificial situation, and, if found to present an anomalous or abnormal orifice, that irritation should be immediately removed.

No case of asthma, given proper, judicious, and correct care, as to diet, as to the general modes of life, and having had the assistance of orificial correction

when needed, followed by careful and regular application of the principles of Chiropractic, will resist complete removal.

Relating to remove occlusion in the phase of abnormality called asthma is primarily addressed to the liver area, and to the nerve trunks in the order named: seventh, sixth and fifth thoracic trunks.

All chronic asthmatics are kyphosed in the dorsal area, the gibbosity being reduced from the fifth to the seventh, and sometimes to the eighth spine. It will be seen, therefore, that incident to the relating just indicated, the Chiropractor should have in mind the correction of the kyphosis.

HAY FEVER

Hay fever is but another phase of asthma, and is peculiarly an inflammation of the mucous lining of the nose, and its relative sinuses and antrums.

Asthmatics do not always present the symptoms called hay fever, but no person ever presents the symptoms called hay fever who is not an asthmatic. He may not be apprised of that fact, but, nevertheless, it is true.

The author has never seen a case of hay fever in a human being that was not also an orificial case of a marked type. He has seen many little children, five or six years of age, presenting the aggravated symptoms of hay fever, and always, upon examination they were found to present the most marked anomalous conditions at the sex orifices.

When the orificial irritation, together with the asthmatic tendencies have produced the tissue condition

necessary for it, there are many phases of irritation that result in aggravated hay fever attacks. Intense and prolonged heat; pollen from many flowers and weeds; new mown clover hay; plain dust in the road; the air striking into the eyes, incidental to riding swiftly in an automobile or train, and many other irritations are known to produce hay fever spasms.

The first duty of the Chiropractor, upon examining a case of hay fever, is to ascertain what the orificial abnormality is, and have same removed, and thereafter follow the same regime, diet and conduct indicated in asthma. No case so handled has ever been known to resist complete recovery after sufficient time has elapsed to restore the adverse tissue condition.

Relating to remove hay fever is the same as that in asthma, with the exception that more definite care must be given to release all occlusion at the suboccipital area, and incidentally to release occlusion of the fifth and sixth cervical trunks, thus releasing the phrenic nerves to the diaphragm, and by this means stopping and preventing muscular paroxysms.

APPENDICITIS

This phase of abnormal process is generally the tissue result of the combination of abnormal phases of the spleen, liver and pancreas, the kidneys and the intestines.

The abnormal condition and process called appendicitis results from a chronic inclination to impaction in the cecum, with marked tissue abnormality of the walls of the gut.

So-called appendicitis never occurs as an acute phase

of tissue abnormality, notwithstanding that therapists classify it as being acute and chronic. Let it be remembered that the tissue situation is always chronic, and that incident thereto there is always dilation of the cecum.

It will be remembered that the appendix opens into the cecum near or at its feetward aspect, and that normally it is the oiler of the cecum. Incident to the chronic phase of tissue abnormality of the cecum, the immediate part of the ileum and the appendix are, of course involved. In the situation just outlined there is a continual retention of toxins in the appendix, so that finally, from the congestion and irritation, motor reaction to it is produced, with a concentration of stimulus from a wider area, resulting in inflammation.

This is the so-called acute phase of appendicitis, and in this phase abnormality is quickly removed under the application of the principles of Chiropractic.

However, it must be remembered that many times the appendix undergoes slight inflammation, which will subside and occur again and again for a long time, while the tissues of the appendix, and incidentally the cecum, are continually undergoing depletion, until finally the base of the appendix loses tonicis, and not only liquids of an irritating nature escape into the appendix, but also solids. In such event, the appendix may become greatly enlarged, and may present a suppurative catarrh, or even an accumulation of pus, which may take on the phase of gangrene.

Of course, such an advanced condition as that last expressed very seldom occurs, but does sometimes occur. Occasionally in very prolonged inflammation and

catarrhal condition, the appendix will have become sore, and will have scarified in relation with other viscera, and healed so as to be attached to the mesentery, or portions of the small intestine, presenting a drawn condition, which prevents normal function of the appendix and cecum.

There are some very aggravated conditions of the character just mentioned, or the supurative type, in which an appendectomy is indicated.

There is also occasionally an anomalous appendix, which, because of its character, should be removed, and occasionally, because of an hereditarily distorted cecum and appendix, the cecum should undergo corrective surgical assistance.

The Chiropractor is cautioned to be on the lookout for such cases, in order that such anomalous situations may have proper and timely care.

So-called appendicitis is always, except in the anomalous conditions referred to, the result of adverse and excessive eating, and, therefore, of course, the very first duty of the Chiropractor, upon being called to a case, is to establish such dietetic measures as will overcome that phase of the difficulty. The very first step usually advisable is to insist upon complete abstinence from food for a time indicated by the symptoms, being all the way from a few days to several weeks.

The first duty of the Chiropractor on coming to a case of appendicitis is to make a very careful examination of the abdomen, and to ascertain by palpation, percussion or otherwise, the actual tissue condition, and the further steps in the case must be taken in strict accordance with what is found by such palpation.

Here again orificial abnormality plays a very remarkable and definite part. If there is an abnormal orifice, the irritation and reaction will center to the area of the weakened tissues of the appendix and cecum, and will greatly retard recovery in the given case. Therefore, it is the duty of the Chiropractor to look into this matter at the very outset.

If at the time of calling upon the patient, or at the time the patient is brought to the doctor, there is an impacted condition of the large bowel, careful and painstaking enemas should be administered to remove all fecal matter from the rectum, and to remove congested conditions from the colon. Enema for this purpose should be by long colon tube.

Enema administered in this connection should usually consist of the administration of from a quart and a half to two quarts of water at three different periods separated by about fifteen to twenty minutes, during the intervals the patient should be permitted to rest.

After this has been accomplished, if, by original examination no indication of perforation has been found, the Chiropractor will proceed to release all nerves to the area of the appendix.

Relating to remove appendicitis will consist of releasing the nerves in the areas of the second lumbar, and twelfth thoracic trunks. Incidentally, however, any of the thoracic trunks may be involved up to the sixth pair, for at the same time there may be impactions in the ascending colon, the hepatic flexure, or the transverse colon.

However, caution is here given that there must be painstaking avoidance of a liver reaction, which is

likely to occur if relating is performed at the sixth, seventh, or eighth thoracic areas, and, therefore, the Chiropractor must proceed cautiously.

Before administering more than the relating at the second lumbar and twelfth thoracic areas, great care should be taken to carefully release the musculature of the abdomen, particularly that from the ninth costal area to the right inguinal region. This muscular release should be accomplished without putting any depth of pressure into the abdomen.

Usually in a few moments after releasing the second lumbar and twelfth thoracic vertebral areas, it will be possible to secure such relaxation of the muscular walls of the abdomen as to make definite palpation of the intestinal situation easy, and the Chiropractor will be guided by the situation he then finds.

If the intestinal condition warrants it, the Chiropractor should proceed to again release the nerves at the vertebral areas indicated, and then, with the patient upon the back, proceed to pass the feces down from the sigmoid flexure; then from the descending colon down through the sigmoid flexure, then around the splenic flexure, down the descending colon through the sigmoid flexure; then around the hepatic flexure across the transverse colon, around the splenic flexure, down the descending colon, through the sigmoid flexure; then carefully release the ascending colon, going around the gut in the same manner.

At this point the Chiropractor should wait a short time, allowing patient to rest, and then should perform release of the second lumbar and twelfth thoracic nerve trunks, with release of the eleventh thoracic and fourth lumbar

areas if the same are indicated. He should then turn the patient upon the back, and place the heel of his hand over the region of the cecum and appendix, below and medial to both, and should make the hand into a triangle which directs the force toward the hepatic flexure, and then should begin a slow, vibratory movement in the direction of the hepatic flexure, with most gentle pressure.

At the time of the application just being described, the operator will find it possible to very clearly define and sense the exact location of the viscera involved.

He must continue the gentle vibration and pressure, coming back every few seconds and starting over again, until he feels the tissues giving way in front of his pressure. During all of the time, he should be getting deeper into the abdomen with the heel of his hand, and continuing to go a little nearer to the appendix. In a short time the impacted contents of the cecum will pass upward into the ascending colon, thus drawing the accumulation in the appendix out into the cecum, and up into the colon.

At the point just indicated, the Chiropractor should cease his efforts for at least half an hour, following which time he should relate again, releasing the same trunks as indicated, and at this time should release the stomach, respiratory and heart nerves, and also those to the brain; following which he should carefully impel the bolus around the intestine if it has not already gone, and then wait a period all the way from two to three hours. If, by that time it has not been expelled, another long colon tube enema should be used, with plain water at blood temperature, and at this time two and a half

to three quarts of water should be used, very slowly filling the whole bowel, and then great care should be exercised in securing a complete expulsion of the water, and all that is contained with it. Usually the bolus that was in the cecum will pass intact, sometimes it will be broken up.

After the bolus has been passed, or when the bowel is emptied, as indicated in the preceding paragraph, relating to completely remove occlusion should be continuous at periods all the way from twelve hours to twenty-four hours apart for several days. After which relating from four to six weeks should follow, during which time the patient should be required to eat very lightly of wholesome and nutritious food.

EPILEPSY

This phase of abnormality receives its name from the character of attack, which is a sudden seizure, and was formerly called "the falling sickness." The student must be careful to fix the fact in his mind that there are many phases of falling sickness, and sudden seizures, which very closely simulate the phase called epilepsy, which really are entirely different.

It has become a fad among physicians in late years to call almost any kind of sudden hysteria, or lapse, epilepsy. But such phases are the result of different causes entirely. In the hysterias referred to, these peculiar symptoms occur: the individual suddenly becomes unconscious, and may remain so for some considerable time; another phase is a short mental lapse of a moment, after which the conversation, or the work in hand, is resumed; or the individual jumps

or moves without being conscious of it, or in walking, suddenly stops and sits down, gets up and goes on again without having any recollection of what occurred. Such phases result from congestion of the brain, and are not accompanied by the other phases of so-called epilepsy.

The general and unqualified fear of epilepsy, because therapy has declared it to be incurable, is so great it is suggested that Chiropractic practitioners avoid as much as possible the use of the term and indeed there is no occasion for its use. The phase is but a varying process after all, the same as any other process of abnormality.

The symptoms of so-called epilepsy are sufficiently regular and pronounced as to leave no necessity for doubt as to the process.

Usually the paroxysm comes on quickly, and generally without premonition. It is quite common for the individual to feel peculiarly better than usual just before a seizure.

In certain types of the phase under discussion, the subject may have recognized the approach of the paroxysm by a sense of depression, by being either moody, excitable or irritable. A real seizure seldom, if ever, occurs while the individual is in bed, and generally occurs during or following an emotional condition, and most frequently within an hour or two after a meal.

The immediate sensation of seizure is usually that of a ball or some solid substance starting from the lower part of the body, and passing upward to the throat. Sometimes this sensation is as though the ball started from the feet. In either event the sensation of the

arrival at the throat marks the peculiar, inarticulate cry accompanied with, or immediately preceding the fall.

During the seizure the muscles of the entire vertebral column, and indeed the skeletal muscles generally, suddenly become violently constricted, so that there is grave occlusion of nerves to all parts of the body.

At this time the body is flexed; the head being turned to one side, and generally to the right side; this on account of the typical scoliosis. The heart action is greatly depressed, and the liquid transportation in the superficial vessels almost stopped, so that the face is of an extremely bluish pallor, and there is a fixed staring expression of the eyes. The person falls, because of loss of equilibrium by flexion.

After the subject has fallen, the constriction of the skeletal muscles continue with great violence; the color of the face slowly changes from pallor to a dark red, then a purplish hue, resulting from congestion in the capillaries of the head, which of course means that there is congestion of both blood and lymph in the tissues of the brain, and if the body were naked these symptoms could be observed in the tissues relative to the solar plexus, and indeed all over the body.

In persons having very strong muscles, such constrictions have been so violent as to displace bones, and even fracture them.

After a time the muscular spasm ceases, and the person lies in the position he is then in, usually on the side, or face down, for a considerable period of time. Occasionally, after the violence of the constriction has passed, the subject may roll about for a time before lying still.

The muscular paroxysm just described continues until the toxic gas accumulated in the alimentary canal has either been forced therefrom, or has been so distributed in the canal as to lessen the irritation. During the intensity of the spasm, breathing is almost wholly suspended, but upon its abatement breathing becomes slow and stertorous almost precisely the same as in apoplexy, and, indeed, from this time on recovery from the paroxysm is very much like its acute phase.

Usually the seizure is not followed by another for several days, but in some cases one spasm follows another in quick succession; the subject having scarcely escaped from one attack until another seizure comes on.

It is some hours after a violent paroxysm before the mind of the individual becomes clear. Upon his becoming conscious after the attack, the subject is usually silent and depressed, seeming to be in a grieved state of mind, and is frequently subject to delirium, as to those about him, his care-takers, etc.

Practically always in grave epilepsy the result finally is loss of mental force generally. However, the individual may be subject to epilepsy of a somewhat grave type for years with no apparent adverse condition. It is said that the Great Napoleon was an epileptic, and although he died young, he died possessed of unimpaired mental faculties.

The adverse process called epilepsy is truly a gastric abnormality. The irritating toxin that by motor reaction produces the paroxysm is a ptomaine, conine or autopoison that accumulates in the small intestine, and when the accumulation rises to a certain gravity, precipitates into a free gas, with practically the force of an explosion.

If instantly the cry and fall occur, the subject is thrown across the lap face down, and the ear placed to the wall of the abdomen, the violent rushing of the gas through the intestine cannot only be plainly heard as of a hissing and rushing sound, but can be felt.

This toxin or irritant producing the epileptic paroxysm has not been isolated, and its chemistry is unknown, but its occurrence is positively known, and the cause of its production is quite well understood.

To properly care for an epileptic, he should be surrounded by good conditions; right mental attitude, etc. On account of the general fear and awe of epilepsy it is impossible to secure these conditions except in an intelligently conducted sanitarium.

The first attention to the subject in the sanitarium aside from correcting his distortions should be to ascertain and control any adverse habits to which he is addicted. He should not be permitted to use any alcohol, or habit-forming drugs of any kind, and should not drink tea or coffee, and should indulge in no rich condiments. Practically all epileptics sooner or later acquire the habit of self-abuse or masturbation. This must be looked into, and if the habit is established, it must be stopped, and the patient should not indulge in any sort of sex excitement or sexual relation.

Epileptics are practically always victims of voracious appetites, and, therefore, have the habit of excessive ingestion of foods. The diet should be limited to great frugality. It should be limited to but two light meals a day, which should occur at eight in the morning, and five in the afternoon, and should consist of substances that must be chewed, if the patient has good teeth,

and should be administered as a mono-diet. If the patient's teeth are deficient, he can be carefully fed liquid food.

The patient should never, under any circumstances, be fed milk or eggs, or any other liquid foods of such dense and rich character as milk. He should be encouraged to drink copiously of good, soft water, being careful that he drinks nothing until two and a half hours after each meal. The patient should be induced to sleep from ten to twelve hours out of the twenty-four, but during his waking time should perform regular, light work of such nature as to give him thorough exercise.

The phase of abnormality usually called epilepsy generally makes its appearance in early childhood, and if taken at once is usually quickly removed by the application of the principles of Chiropractic. Of course, the longer the process has been in operation, the more difficult is the removal. By the time the patient is twenty to thirty years old, he should be in a sanitarium, and under careful application of principles of Chiropractic all the way from six months to two or three years.

Relating to remove epilepsy is particularly and primarily addressed to the stomach, liver, and kidney areas. That is to say, the release of the third and fourth thoracic trunks, the fifth and sixth together with the seventh thoracic trunks, and the eleventh and twelfth thoracic trunks. Further, the intestinal aspects will require correction at the headward lumbar areas, and the motor reactive effects from the toxins will require constitutional correction in many parts of the body. Persistent and intelligent care, and application of the principles of Chiropractic, are the only things that has ever been known to wholly remove epilepsy, especially in adult life.

CHAPTER XXX

RHEUMATISM AND SEQUELS

Neuralgia—Angina Pectoris—Sciatica—Muscular—Articular—Gout

Therapeutic symptomatology addresses considerable attention to the subject of rheumatism, and gives much space to theory as to its relief or palliation. It is, however, nowhere asserted in therapy that rheumatism can be cured, to use their term, but there seems to be some contention that it may be palliated.

The tissue condition called rheumatism is always chronic. In other words, the incipient phases of the tissue conditions called rheumatism present no symptoms that are observable.

The reason for the fact just stated is that the process called rheumatism is a sequence to a somewhat grave glandular abnormality, and is never presented except as a sequel to much glandular abnormality, finally being paramountly expressed through the liver with the spleen as its accessory, and the kidneys.

The part played by these large glands in the production of rheumatism occurs in this way. The liver, in its tissue abnormality, produces an excess of uric acid, which of course is contributed to by the spleen. This is really a ductless office of the liver, and at the same time, of course, the liver produces an abnormal glycogen and bile, so that the system generally loses its characteristic resistance, and chemical equilibrium, which is added to

by the abnormal bile, causing the absorbed substances from the intestine to be of an adverse chemical nature.

The liquids of the body, and particularly the lymph and blood, being loaded with an adverse chemistry, of course, puts upon the depuratory channels of the body an unusual burden, which particularly and paramountly falls upon the kidneys; for they must particularly expel the excess uric acid, and a large part of the abnormal glycogen.

From the condition just stated, the kidneys soon become over-taxed, and fail to perform their eliminative office with sufficient virility to carry away the excess toxins being produced, and those which are not eliminated through the kidneys are thrown back, through the ductless offices of those organs into the general, liquid-transportation systems, concomitant with which, the skin and lungs fail in excess depuration, and the body becomes loaded with the toxin called uric acid.

In the situation just described, congestion of this abnormal chemistry to areas in the body to which there is occlusion of stimulus is certain to occur, and when such accumulations arise to sufficient gravity, irritations from them become so profound as to result in motor reaction to the area, which results in the production of the peculiar symptoms which are called rheumatism.

The student will observe that rheumatism so-called is but the accumulation of these acid toxins in some specific, or more widespread areas of the body, and precipitated in such nature as to directly affect the terminals of the nerves involved, causing motor reaction, constriction, pain, etc., that are incident to the adverse tissue condition and process.

It is because of the adverse situation just described, the accumulation of the toxins or adverse chemistries, resulting from failure of elimination, that has caused the therapeutic world to say that the sickness called rheumatism is because there is some " rheum" or poison in the blood, but the therapeutic world has never understood just what they mean by rheumatism.

Rheumatism, or the adverse process that has just been described, may be discussed under the several headings of this chapter as a matter of convenience, but the student must understand that there really is no difference in these phases, except in the location in which they occur, and therefore, the location of occlusion causes their varied expressions, and, of course, the varied specific effects that result therefrom, for it must be well understood that all adverse symptoms of the character indicated are nothing in the world but plain, adverse effects of accumulated toxins, because of glandular abnormality as described, and consequent failure of elimination.

NEURALGIA

There are two phases of neuralgia, so-called. There is first pain, incident to sudden and acute occlusion of nerve stimulus. This, from a Chiropractic standpoint, really does not constitute neuralgia, but, since it is pain in nerves, it might be very properly classified under that head. This phase of pain, or neuralgia, is instantly removed by correcting the distortion causing it. The other phase of neuralgia is really a rheumatoid condition, surrounding and in a nerve trunk, so that by the disintegratory influence, exercised by the submergence

of the toxin, the nerve trunk is irritated, and there is much painful expression. In this condition, the nerve trunk may become swollen, and severely congested and inflamed, in which event it is sometimes classified as neuritis.

The diagnostic problem presented to the Chiropractor, when a case of neuralgia comes to his attention, is to determine whether the result is acute, and therefore, just a plain neuralgia, or whether it is a rheumatoid neuralgia, therefore, an incidental symptom, arising from a general adverse, glandular condition. This he will have no trouble in determining from a Chiropractic examination.

ANGINA PECTORIS

This name is given to a peculiar phase of rheumatism, which occurs in the chest or thorax; usually in the region of the heart, and has been supposed to be produced because of some abnormality of the heart or aorta. This, however, is not true. The adverse process is purely of a rheumatoid nature. So-called angina pectoris never occurs except when the general, adverse, glandular conditions, already described in this chapter, have existed chronically for some time, and when there is subluxation or distortion so that nerves are occluded to the areas of the thorax, in which this phase occurs.

Like all muscular rheumatism, the phase of abnormality under discussion occurs in spasms, in which constriction may be so great as to occlude nerves to the heart and respiration, sufficiently to result in death.

SCIATICA

The therapeutic world does not classify sciatica as rheumatism at all, but it must be remembered that sciatica is nothing more than plain rheumatism.

In order not to be misunderstood, the student should understand that there are two phases of difficulty often called sciatica, one of which is not of the rheumatoid type, to any definite extent.

The phase just referred to is the motor reactive one, which frequently results, as already described, in neuralgia, from irritation or injury of the terminals of nerves, so that there is intense motor reaction, constricting the sciatic foramina, and the tissues in the immediate area, so that the sciatic nerve trunks are acutely occluded.

The phase just described occurs as the result of many injuries to the feet, but is most definitely and generally produced by the wearing of shoes that are too tight, or shoes which throw the feet in abnormal positions, so that there is constant irritation upon the nerves. This is a very sure and regular means of producing sciatic neuralgia; which, however, always partakes somewhat of the rheumatoid nature.

The other phase of sciatica is nothing in the world but regular rheumatism, that is, an adverse situation in which, because of occlusion of nerve stimulus the acids and toxins produced by the adverse condition of the glands, continually precipitate in the gluteal tissues.

Occlusion producing sciatica results from displacement of the sacrum, by its being either tipped base ventrally, or apex ventrally, with incidental occlusion of the fourth and fifth lumbar trunks.

On account of the location of the difficulty just pointed out, it will be seen that the effect of occlusion is in the gluteal muscles, and aponeuroses around the sciatic foramina, and incidentally the muscles extend-

ing through these foramina, and in the hamstring muscles, and those of the calf of the leg, and the plantar surfaces of the feet, and also the intrinsic muscles of the feet.

The rapid increase of so-called sciatica, which has occurred in the last several years, is to be accounted for particularly because of the ridiculous footwear that has been the fashion, especially for the past twenty-five years, which has become more and more bizarre and ridiculous each year.

All persons should know that the foot is constructed to be used with the heel upon the same level as the ball of the foot, and unless carried in this manner, the whole body is thrown out of equilibrium, and the nerves are all put upon a strain and thus irritated.

The heel of a shoe that raises the heel of the foot above the ball, throws the entire body out of equilibrium, and makes it necessary to accommodate to the situation, by changing all of the curves of the body, and particularly the lumbo-sacral curve must be increased, whereby unusual pressure is put upon the fourth and fifth lumbar trunks. To sustain the erect posture in this situation, the dorsal longitudinal muscles of the column are put upon a strain, which tends to produce disrealtion of the sacrum headwardly.

Careful investigation will disclose that about seventy-five per cent of so-called sciatica is the result of wearing abnormally constructed footwear, and footwear that has become distorted by use.

It, of course, goes without saying that in order that sciatica shall be removed the person must adopt a normal posture shoe, such as that which has this year

been placed upon the market by Dr. E. E. Hosmer of New York City. The wearing of these shoes alone would ordinarily overcome sciatica of the neuralgic type, and the wearing of such shoes with the proper application of the principles of Chiropractic will quickly overcome any phase of sciatica.

MUSCULAR RHEUMATISM

This phase of abnormality needs no discussion further than to say that in muscular rheumatism the abnormal toxins described and referred to in this chapter, precipitate in certain areas of muscle tissue.

Of course, it will be understood that the reason that the toxins center and precipitate in certain areas of muscle tissue, is because of occlusion of stimulus to those tissues, resulting in the formation of stasis, and therefore, an accumulation and precipitation of rheumatoid toxins.

Because muscles are soft in their nature, and therefore, do not so rigidly confine the accumulated toxins, and do not bring such resistance to congestion and swelling, muscular rheumatism is not so intensely painful as articular rheumatism.

In its incipient phases muscular rheumatism is nearly always classified as neuralgia, wry-neck, lumbago, and is sometimes merely referred to as wandering pains through the muscles of the body.

However, it must be here suggested that when a person observes wandering pains, and the tendency to painful conditions in the soft tissues of the body, he should immediately understand that his general glandular condition is not as active as it should be, and

that there is a lack of equilibrium in the acid production of his body, and a failure of elimination, which should immediately have intelligent attention.

If the incipient phases of muscular rheumatism, such as neuralgia, wry-neck, lumbago, etc., are not to be classified as muscular rheumatism, then we would have to reach the conclusion that muscular rheumatism is always chronic, but there is no reason for any such classification, for the phases mentioned, and many others that might be enumerated, are nothing other than incipient phases of muscular rheumatism. If the general glandular condition causing muscular rheumatism is neglected, the adverse process may continue for many years, progressively becoming worse, and may produce great damage, and even permanent changes in muscular structures.

One of the marked symptoms of muscular rheumatism is the sensations produced by changes in the weather. Those affected with muscular rheumatism are, to a large extent a barometer; they are always put upon notice when a cold, damp period is coming on, by the tissue changes incident to the accumulated acids.

So-called muscular rheumatism is especially affected by the diet of the individual; it being rendered much worse by over-eating, and is generally lessened by careful eating of light diet. It will, of course, be markedly affected by the use of exciters and narcotics, and one suffering this adverse phase should use no intoxicants or habit-forming drugs of any character.

Muscular rheumatism most frequently occurs in the intercostal and subscapular muscles, those of the dorsum, and particularly those in the regions of the kidneys,

in the muscles of the neck, the muscles of the thighs, calves of the legs, and feet.

It goes without saying that for rapid recovery from muscular rheumatism every attention possible must be given to the diet, to proper clothing, housing, ventilation, and care of the body, incident to the faithful and painstaking application of the principles of Chiropractic.

ARTICULAR RHEUMATISM

Articular rheumatism, sometimes called rheumatic fever, presents the most marked, and perhaps the most violent symptoms of any so-called rheumatism.

The statement just made is equivalent to saying that stasis and precipitation of rheumatoid toxins most frequently occurs in articulations. This is not just what is intended to be said. The symptoms of articular rheumatism occur so frequently, because of the rigidity of the articulations, and the necessarily close approximation, so that the slightest irritation of the joints, resulting in congestion and swelling, introduces the element of pronounced pain. The further fact should be carefully taken into account, that joints generally suffer primary distortion, incident to locomotion and work. Distortion most frequently occurs in that part of the vertebral column incident to the trunks which constitute the brachial plexus, at the headward extremity, and the lumbo-sacral plexus incident to the lower extremities. These facts account for the frequency of articular rheumatism in the shoulders, elbows, wrists, and hands; and the thighs, knees, ankles and feet.

The elevated temperature which occurs so frequently

in articular rheumatism results because of the extreme congestion of acids in the joint capsules, because of the close confinement, producing such intense irritation, motor reaction, and, therefore, columnar constriction and such pronounced concentration of stimulus to the area, which results in a very excessive friction, and, therefore, elevated temperature.

If occlusion to the area is not decreased, and depuration of the toxins from the joint is not secured, marked swelling occurs, the only amelioration of which is the partial separation of the joint surfaces—really a functional subluxation of the joint. When this occurs the painful condition is lessened at least until the room thus gained is again filled.

In cases in which the process is permitted to continue, it frequently happens that the joints are so injured by being forced apart that there is an infusion and precipitation of solid residues of acid. Sometimes in such cases complete calcification of the joints occurs, in other words, the fluid cavities of the joints are destroyed, in which event there is complete loss of the joint which is stiff and rigid.

The therapeutic method of treating articular rheumatism is to administer certain internal medicines, and to place the area affected, if in an appendal joint, higher than the body, and entirely at rest. The medicines administered generally serve to increase the solidity of the precipitation. Permitting the part to remain still is the surest means of securing calcification and ankylosis, with loss of joint cavities.

The Chiropractor caring for a case of so-called articular rheumatism must see to it that the joints are

moved with regularity, regardless of the pain such movement causes the patient. This phase of attention will not be attended with so much difficulty, because very soon after the vertebral release of nerve trunks to the area affected, movement of the joints in that area will not occasion anything like the pain one would anticipate.

After vertebral release of nerves to the area affected has been accomplished, if the case is an old one, and especially if it has been treated therapeutically, some preparation should be made before the actual joint movement is attempted. This consists in very delicate relating movements around the area of the joint, incident to which, if the joint is excessively painful, it is well to inhibit nerve stimulus and blood to the area for a short time, by pressure on nerve trunks and arteries to the area, at some distance from the joint involved.

The author has secured sleep in patients severely afflicted with articular rheumatism by inhibiting nerve trunks and arteries to the area by direct pressure, when they had been unable to sleep even as a result of sedatives.

If the principles of Chiropractic are properly and regularly applied to acute phases of articular rheumatism, it is surprising how quickly the painful part of the abnormality will disappear; depuration takes place from the joints, and the patient is on the highway to rapid recovery.

In the usual cases of ankylosis, in which the joint cavities are not destroyed, careful application of the principles of Chiropractic for a period varying all the way from three months to a year, will secure mobility of the

joints and restore them to practically normal conditions.

GOUT

Gout is but the chronic result of articular rheumatism and sciatica as applied to the feet.

Therapeutically speaking, gout is almost wholly confined to the tarso-metatarso-phalangeal joints of the great toes. However, any articular rheumatism of the feet is conceived in Chiropractic as falling within the same classification.

Under our social environment, the habit on the part of practically all women and nearly all men, to wear shoes all the way from one to three sizes too small, with thin, soft soles, tends to the production of gout-like or rheumatoid conditions of the feet.

In the case of gout, there is no possibility of recovery unless the person adopts a sensible, normal footwear, which must be sufficiently large that the foot is not squeezed or compressed, and the sole should be sufficiently thick and stiff, and so adapted to the plantar surface of the foot as to result in an easy and sustained condition at all parts thereof.

Gout used to be a fashionable disease, largely assigned to those who lived lives of idleness and profligacy, but under the prevailing social customs all departments of society are subject to this adverse phase.

Relating in any of the phases here mentioned must be left to the anatomic knowledge and sound judgment of the Chiropractor. That is to say, he must know the nerve trunks vertebrally involved, from the location of the difficulty or symptoms, and must proceed to secure their release.

In neuralgia of the face, the area will usually be the third pair of thoracic trunks, and the suboccipital area; while, if it is intercostal, the area will usually be the headward thoracics, but may be any trunks down to the eighth thoracics.

In angina pectoris, the area will usually be the trunks of the brachial plexus, particularly the eighth cervicals, but may be at some of the headward thoracic trunks.

In sciatica, attention will be given to the fourth and fifth lumbar areas, and the sciatic foramina incident to correcting the position of the sacrum. In muscular rheumatism of the arms, attention will be directed to the brachial plexus; of the legs to the lumbo-sacral plexus, tissues of the pelvic girdle, those around the acetabulum and obturator foramina.

In articular rheumatism of any of the joints of the headward extremities, the brachial plexus will be primary; those of the lower extremities, the fourth and fifth lumbar and sciatic trunks, and the obturator trunks in those foramina.

In gout, particular attention will be given to lumbar and pelvic release, and in addition thereto the head of the fibula at the knee joint, and the bones of the ankle joints; also the metatarsal and phalangeal joints.

In all phases of rheumatism the student must remember that the paramount correction to remove the phase of abnormality is to release the nerves to the kidneys and liver, since rheumatism is specifically kidney disease.

CHAPTER XXXI

INCIDENTS OF KIDNEY ABNORMALITY

Anemia—Sunstroke—Dropsy

There are certain phases of abnormality that, while not coming within the urinary system specifically, are so closely related in tissue condition, and therefore function, as to be a part of the general discussion of kidney abnormality, and these phases must have general consideration here.

It has already been stated that the kidneys are organs of at least dual function. That is to say, they excrete urine, and perform a ductless function.

The kidneys, as will be remembered, have a complete vascular transportation of the same analogous character as that of the portal system in the liver. In other words, blood in the kidneys passes through two sets of capillaries, indicating functional changes incident to both.

There are two distinct functions to be constantly kept in mind, and traced in any diagnosis with respect to the kidneys.

In the first instance, it is always a matter of extreme importance to ascertain whether the kidneys are eliminating the proper amount of urea, and to ascertain whether other depuratory substances are being eliminated in proper chemical relation, and if this is found to be true, it is a strong indication that the kidneys are normal.

However, it is not conclusive proof that the kidneys

are normal because there is being eliminated through them a proper amount of urea with the salts, etc., which should be excreted from the kidneys, for in the situation it may be necessary, in order that the body shall not be poisoned, that a great deal more than the regular or proper amount of these substances should be excreted.

In an investigation, then, to ascertain whether the kidneys are normal, the same character of inquisitive attention must be given to the entire glandular system of the body, but particularly the large glands, and especially the spleen and liver. In this view it has become quite the custom to think only of the liver, but it should be remembered that the spleen is fully as important, being accessory thereto.

Some reference was made to this proposition in connection with liver abnormality, and incident to rheumatism and still further reference will be made to it in connection with other phases of abnormality. The thought to be presented here is that abnormality of the glands, and particularly the large glands referred to, produce tissue changes, which necessitate other and more extensive depuration than the usual and ordinary.

It is the purpose of uric acid to protect and preserve tissue constituents, and glycogen is one of the principal constituents of tissue formation and maintenance.

In other words, in the construction of tissue glycogen, albumin and uric acid must be in equilibrium, or in proper formula or the tissue will lack resilience, that is to say, resistive cohesion.

If, therefore, uric acid is produced in excess or in abnormal formula, it has the effect of preventing

resistive cohesion of glycogen and albumin in their tissue relations, resulting as an immediate in the production of a non-virile tissue, but finally and in the ultimate, resulting in one or both of these substances being depurated from the organism as an element of waste.

If glycogen be produced in excess, and in abnormal consistence, it does not enter normally into the production of tissue, but results in the production of a non-virile tissue, and in the more aggravated conditions, in an excessive waste of glycogen through the depuratory functions of the body.

If in a chronic and prolonged acidosis there is an excess of albumin, the character of which is injured by an excess of abnormal uric acid, it may fail to take its place properly in tissue formation resulting in the production of invirile tissue, and in advanced phases excessive discharges of albumin through the depuratory channels of the body.

As to the last statement, it must also be remembered that the simple excess accumulation of albumin in the body, necessitates an elimination of that excess constantly, and particularly through the intestine, but also through the kidneys and to some extent through the skin; in the advanced and abnormal phases of abuminous waste, pronouncedly through the four channels of elimination from the body.

In the various ways indicated in the preceding paragraph, tissue degeneracy comes about, which is of course in such phases accessorily contributed to by abnormality of all the small glands deposited variously in the tissues of the body.

ANEMIA

Anemia is considered therapeutically under two heads—simple anemia, and progressive, pernicious anemia.

The therapeutic conception of anemia is that it is a deficiency in the production of blood, or in the conveyance of blood to a part. To say that such conceptions are erroneous, and of no value is simply stating the matter in its simplest form.

Anemia does not necessarily refer to regeneration of blood, or specifically to the production of blood, but wholly refers to a tissue condition.

Anemia takes place in any tissue to which there is pronounced occlusion of nerve stimulus, which, of course, serves to lessen the transportation of blood, and therefore, lymph to the part, resulting in less than normal assimilation taking place in the area, and necessitates an increased or pathologic disintegration, or depuration, from the area. It will be seen that when the process just stated is taking place in any area of the organism, the tissues involved must undergo anemia. The phase of tissue construction under the adverse conditions just stated may, for the purpose here, be considered as simple anemia.

There is the adverse and general process which has been quite completely covered in the introduction to this chapter, which in certain phases of it results in an adverse tissue condition and process, which for convenience might be called progressive-pernicious anemia. That is to say, progressive, because in such adverse condition, unless assistance is given to the organism, the adverse phase continues and in pernicious in that the

tendency is always to worse tissue conditions. All of which is not more than saying that in the adverse, glandular condition referred to in the introduction of this chapter, digestion must be largely overcome; absorption very greatly interfered with; the production of leucocytes in the lymph glands greatly retarded with a lessening of the production of white corpuscles; reduction of aeration with a material lessening of red corpuscles; the accumulation of carbon-dioxide greatly increased, with not only depletion of the lymph of the whole organism, but also of the blood.

The situation does not justify making a mystery of anemia from the standpoint of occluded nerve stimulus.

SUNSTROKE

This term is really applied to prostration by heat. It must not be thought that heat to produce this must come from the sun. The same character of prostration will occur by exposing the organism to too great and prolonged temperature, no matter how applied.

The phase of tissue condition called sunstroke, however, more particularly refers to heat prostration incident to kidney abnormality. Many persons are subject to what is called heat prostration, or sunstroke, in the temperate zone, in which all persons acclimated should not suffer at any time from the heat.

The reason for the truth just stated lies in the fact that, owing to modes of life—eating, housing and clothing, and especially to the pernicious habit of tub bathing—a tissue condition of the kidneys and general body is brought about, which makes it very susceptible to heat above the ordinary temperature.

No case of heat prostration, or sunstroke, has ever been known to occur in persons who did not present a chronically abnormal kidney, and therefore, acid tissue condition.

The symptoms indicating so-called sunstroke begin by a sudden chill, which is sensed as cold waves up the back toward the occipital region. The heart's action is greatly labored; there is a sense of throbbing in the temples, and of complete prostration. Sight becomes dim, as though a dark mantle were thrown over the eyes. Sweat, which usually has been profuse, ceases entirely, and sometimes the patient completely loses consciousness. Usually, however, only falling prostrate and remaining inert.

A patient suffering from sunstroke should be placed in a shaded room in which the temperature should be brought to about seventy degrees Fahrenheit. No ice or extremely cold water should be applied to the body or head. However, the clothing should be removed, and the surface of the whole body should receive light and rapid friction with a rough towel or with the hands, for the purpose of breaking up the fixation of the skin.

Relating in a case of heat prostration or sunstroke, should be first directed to release of the nerves of respiration and the heart and brain; followed by release of nerves to the kidneys, which should be succeeded by such incidental corrections as are indicated.

Under the application of the principles of Chiropractic, equilibrium of liquid transportation will soon be restored, and in a few hours or at least days, the patient will seem as well as common, although it will take some weeks to remove the general, chronic, adverse condition.

DROPSY

Dropsy is a term applied to the tissue conditions of the body in which lymph accumulates in excessive quantities, and in abnormal places, or, in other words, in the spaces of the body, which should only be potential cavities, and should not be occupied by an excess amount of liquid. In connection with this statement, and in explanation thereof, it must be understood that lymph normally reaches every atom of animate tissue of the organism, and in this physiologic sense there would be no places in tissue where the presence of lymph would be abnormal, but the reference here is wholly to pathologic accumulation.

Dropsy refers particularly to the pathologic accumulation of lymph or the failure of transportation of lymph, which results in actual liquid distortion of tissue, and a persistent occupancy by liquids in excessive quantity.

It must be understood that the accumulation of lymph in what are ordinarily classified as the cavities of the body, such as the thorax, abdomen, etc., displaces the walls of those cavities and produces distortion.

Certain reference to dropsy, either directly or by analogy, has been made in connection with every phase of abnormality in this work, using such terms as "excess liquidity," etc., and the student is here cautioned to carefully observe those different statements.

The phase of abnormality called dropsy is the culmination of the negative process in so far as it can be accomplished, and the part or organism remain animate, and therefore, of course, dropsy is always a grave phase of abnormality.

In the process of almost any phase of abnormality that tends toward a fatal issue, dropsy finally occurs. It need not be pronounced, but it always occurs as incident to pernicious disease at some phase before the culmination.

Dropsy, however, more frequently occurs as incident to the general glandular condition discussed in this chapter, and as a sequence of that phase of abnormality called rheumatism.

Therapeutists sometimes suggest that rheumatism causes dropsy. This, of course, is not true, but the effects of widespread occlusion as incident to general glandular abnormality, and specifically abnormality of the large glands, which always precedes rheumatoid conditions, it can be plainly seen prepares the way and finally results in the negative tissue condition in which dropsy culminates.

It will, of course, be understood that in a tissue condition in which dropsy occurs, that assimilation has for a long time failed very markedly; that disintegration has been greatly in excess; that the structures of the area have been acting under anemia some time and the tonicity is so wholly lost by these adverse phases, that distention and liquid accumulation readily occurs.

The accumulation of liquids in excess in a cavity is called infiltration, and under various phases of abnormal process infiltration may, and frequently does occur, in any of the cavities of the body.

Therapeutists have seen fit to classify dropsy under several different heads, which, while it is not necessary, and cannot be conceded to distinguish the processes, still since the names give some convenience of reference they will be adopted in this connection.

Anasarca is a general dropsy involving the entire tissue of the body in a general way, and of course it will be understood that this is only an analogous dropsy, for anything like a complete dropsy would result in death before complete accomplishment.

Acites is an infiltration into the potential cavity of the abdomen. This process may become so marked as to produce such general pressure and irritation as, by the process of motor reaction, to produce constriction and occlusion to the heart and respiratory organs, resulting in death.

Hydrothorax is an infiltration into the so-called pleural cavities, or pleural and pericardial cavities of the thorax. This is a very dangerous phase, and unless it has intelligent and apt attention will speedily result in death.

Hydrocephalus is an infiltration or dropsy, occurring in the meningeal sacs, or ventricles of the brain. This situation may result from an accumulation of liquids in either of these or both, and is usually an excessive accumulation in the meningeal sacs and ventricles of the brain.

Hydrocele is an infiltration into the cavity of the scrotum surrounding the testes, the scrotal tissues being subject to great distension. It frequently occurs that much liquid thus accumulates. Ordinarily, under the application of the principles of Chiropractic the dropsical condition called hydrocele will be quickly removed by exosmosis.

Ovariocele is an infiltration through the capsule of the ovary, and is frequently referred to as ovarian dropsy or ovarian cyst. In this adverse tissue condition surgeons

always recommend extirpation of the ovary. However, this is no more necessary than excision of the testes in hydrocele, for under the application of the principles of Chiropractic ovariocele will usually be quickly reduced by the process of exosmosis. Of course, it must be admitted that there are cases in which ovarotomy is indicated, and should be performed.

In practically all accumulations of liquid into cavities under the process called dropsy, drainage of those cavities is paramountly indicated. Of course, it must be suggested that in hydrocephalus draining is very difficult, and is always a dangerous proceeding, and yet it is believed that much will be accomplished when the method is better understood.

Drainage of cavities is accomplished by a process called aspiration, which is the projection of a hollow needle through the wall of the cavity from which the liquid is drawn off, when the needle is removed and the opening closed, usually by placing over it a little adhesive plaster.

There was formerly a method of inserting a silver tube through the wall, into which a stopper was fitted, but this method has properly fallen into disuse.

In cases in which aspiration is indicated the Chiropractor should not hesitate to have it performed, for dropsical accumulations in a cavity are very irritating, and cause all phases of adverse process under which the body is laboring to be worse.

Relating to remove dropsy, of course, will be directed specifically to the release of nerves to the area of accumulation, and incidentally, but paramountly by releasing nerves to the kidneys and liver.

Of course, in this connection it must be suggested that primary attention in such cases is always directed to release of nerves to the brain, to the heart and to the lungs.

CHAPTER XXXII

MOVABLE AND FLOATING KIDNEY

There are certain distortions of tissue which seriously affect the tissues of the kidneys, and also their functions, and incidentally affect tissue condition and function in other parts of the body. These must be given definite consideration in this connection.

The distortions referred to in the preceding paragraph are what has been termed movable and floating kidney, and they will be discussed in the order named.

MOVABLE KIDNEY

Recalling the anatomy of the kidneys, it will be remembered that they are placed in what are called renal depressions in the muscles of the posterior wall of the abdomen, and rest in relation with the psoas and quadratus lumborum muscles, and incidentally the crura of the diaphragm.

It will also be recalled that the kidneys are sometimes completely shut out from the abdominal cavity by a complete covering of peritoneum, or serous membrane, but that sometimes the peritoneal covering on the ventral aspect of the kidney is deficient.

In the condition just described the kidneys undergo two remarkable phases of conduct in their distortion, which constitute the pathologic differences between movable and floating kidney.

In distortions of the kidney, where the peritoneum is

not deficient, the situation presents a movable kidney, but where the peritoneum is deficient the result is a floating kidney, which phase will be considered later in this chapter.

In cases where the peritoneum is not deficient, but covers the ventral aspect of the kidney, it sometimes occurs as a result of pronounced and progressive pathology, or as the result of trauma, that one or the other, or both kidneys, are disrelated by separation between the fatty capsule and the fibrous capsule, in which event the kidney drops feetward and ventrally, and produces a peritoneal pouch in which it moves obliquely upward and downward.

The situation just described presents all of the phases of a movable kidney or of movable kidneys.

It sometimes happens in persons that have undergone severe emaciation as a result of prolonged disease, that the peritoneal pouch becomes greatly elongated, so that the right kidney passes down behind the transverse colon, and between the hepatic flexure and the descending duodenum almost to the umbilicus, but, of course, in such a situation it can only go as far as the peritoneal pouch is long. The left kidney is never perceptibly movable.

It is very seldom that movable kidney results from traumatic injury *per se*; that is, it sometimes results from traumatic injury, as incident to emaciating pathology, but it may be safely said that it never results from independent trauma.

The student must definitely fix it in his mind that the cardinal difference between movable kidney and floating kidney is that in movable kidney the kidney remains

behind the peritoneal membrane, which is not deficient, and therefore, does not enter the abdominal cavity; while in floating kidney, the kidney has not only left its seat but has passed into the abdominal cavity proper.

The general symptoms of movable kidney are practically identical with those of floating kidney, but are usually very much less pronounced in their general nature, and particularly the mental phases are not so aggravated, because the irritation is not so intense and continuous.

It should be said, however, in connection with movable kidney that it is very much more easy to restore the kidney to its seat, and to recover the parts from the abnormal tissue phase in movable kidney than in floating kidney. However, the method of procedure is substantially identical.

The entire subject of care in case of movable kidney will find its definite discussion under floating kidney, which subject will now be discussed.

FLOATING KIDNEY

In this phase of abnormality the peculiar anatomic situation, by which there is a deficiency of the peritoneal covering on the ventral aspect of the kidney, permits its somewhat easy escape ventrally and downward into the abdominal cavity.

A careful examination of the anatomic situation of the kidney will disclose the fact that except for the retention of the fatty capsule, and the buoyant resistance of relative viscera, there is not much to retain the kidney in place ventro-feetwardly, except its peritoneal covering.

In floating kidney, where the peritoneal covering is deficient, and the kidney pulls loose from the fatty capsule, it descends between the duodenum and the hepatic flexure behind the transverse colon in the abdominal cavity, and not behind the peritoneum as in movable kidney.

The discussion just given apprehends the right kidney as being displaced, and it is displaced about as six to one with the left kidney. When the left kidney is floating it descends behind the transverse colon, and under the tail of the pancreas, between the splenic flexure of the colon and the stomach, and comes to occupy a place relative to the umbilicus, and near to it on the left side.

When the right kidney is floating, it occupies one of two positions. It is either found near the umbilicus, or in the right iliac fossa, and in either of these places it is sometimes found adhered to relative mesenteries.

When the right kidney is floating in the same manner described it is relative, generally speaking, to the mesentery, to the convolutions of the ilium, and sometimes to the ascending colon; while, when the left kidney is floating it is in relation with the mesentery of the jejunum, and with the descending colon, which, because of its median direction, forces the kidney toward the umbilicus in relation with which it is often adhered.

It will be remembered that the right kidney lies on a lower level than the left, and a considerable portion of it extends below the more rigidly placed relative viscera; only a little more than its headward half being closely surrounded by such relationship. This accounts for the greater frequency of displacement of the right kidney;

the left kidney being closely hemmed about by rigid viscera.

Floating kidney is a grave phase of abnormality. The general situation and results are sufficiently described under the subject of visceral distortion, and visceral relating in the first volume of this work, to which the student is now requested to refer. It is only necessary here to remark that the irritation from a floating kidney presents widespread motor reaction with columnar constriction, and many locations of marked occlusion substantially involving the entire organism.

To describe the symptoms of floating kidney would be to recount the symptoms of substantially every phase of tissue abnormality, and therefore, all adverse function that can occur in the human organism, which would be a useless effort and waste of time.

For the student's particular advantage it may be said that the most pronounced symptoms of floating kidney are those of excessive general debility of the tissues of the abdomen, pronounced gaseous conditions of the bowels, marked constipation, pain in the abdomen, usually radiated from the right lumbar up across the body towards the heart; pain radiating from the nipple on the side affected to near the umbilicus; pain radiating down the legs to the ankles and feet incident to the hypertonicis of the psoas muscles; all areas of motor reaction of the vertebral column greatly constricted, with extreme tendency to fixation in the somatic musculature over the whole body.

The motor reactive centers and muscular constriction just referred to will be found more pronounced relative to the following nerve trunk areas; third thoracic,

eighth cervical, first and second cervicals, eleventh and twelfth thoracics, and the second and fifth lumbar trunks. Of course, the student will understand that the most marked motor reaction and definite constriction and fixation, will be at the eleventh and twelfth thoracic trunk areas.

The motor reaction, constriction and occlusion just referred to will, of course, result in a fixation of the thorax and parietes of the abdomen, especially of the affected side, and in the thoracic area there will be a continuous tendency to the production of neuralgia amounting frequently to mild pleurisy, while the abdominal parietes will be so constricted as to prevent anything like normal conduct of the bowels.

If the patient be a female, the abdominal constrictions will cause a compression of the pelvic viscera, to such an extent that normal conduct cannot be had, and the woman will suffer from such conditions as prolapsis of the uterus, suppression of urine, catarrh of the bladder, catarrh of the urethra, vaginal catarrh, difficult menstruation, uterine hemorrhage, and so on with this type of abnormality, to say nothing of rectal difficulty, hemorrhoids and the production of pathologic fungi in the anal canal.

If the subject be a male, the visceral compression into the pelvis will result in catarrh of the bladder, prolapsis of the bladder, enlargement and catarrhal condition of the prostate, prolapsed prostate, urethral inflammation or catarrh, congestion and disturbance of the seminal vesicles, the loss of sex power and phases of that character and also rectal prolapsus, usually accompanied with sigmoid prolapsus, constipation,

hemorrhoids, and pathologic fungi in the anal canal.

Another pronounced symptom of floating kidney is great congestion of lymph and blood in the head, but particularly in the brain, eyes, capsules of Tenon, etc., accompanied by a "dazzling" sensation in the eyes; that is, rays of light seem to tremble, and there are specks and dots before the eyes, and not infrequently a tendency to apparent shimmering of the landscape.

The congestion of lymph and blood in the head, just described, results from the extreme motor reaction and muscular constriction referred to in preceding paragraphs of this chapter. Many times these symptoms become so pronounced as to result in incipient apoplexy.

As a result of the congestion in the brain there is always much mental disturbance. This will be almost universally indicated by the fact that it is impossible to please the patient or satisfy him in any way. No matter what you do for the floating kidney patient, he is always quite sure to think you did it wrong, and that instead of helping him you hurt him; instead of making him better he has been made worse.

One subject to floating kidney usually sleeps poorly, is restless and irritable, and is constantly obsessed with vague fears of adverse and impending events. The mental attitude uppermost is the overwhelming desire for rest. The patient does not want to be disturbed, but wants to rest, and will assure his doctor that if he could just rest for a long time he would be all right, but rest does not avail, and after lying in bed for hours he is more excited and irritated than when really tired.

If the diagnostician fails to locate a movable or float-

ing kidney, but has a patient in which the symptoms detailed are pronounced, and when the patient has been under the proper application of the principles of Chiropractic for two or three weeks, and his mental attitude remains the same, and there are no pronounced symptoms of improvement, he may be very certain that there is one of two conditions: either movable or floating kidney, and if he has not been able to verify such diagnosis, he should call consultation.

A diagnostician especially skilled in palpation should have no difficulty in locating a movable or floating kidney. In practically all cases he will find it in one of the locations that have been described, and he will know it immediately, for when touched it will have somewhat the sensation of a hard ball floating in a thick fluid.

The diagnostician is cautioned that in palpating for movable or floating kidney of the right side to be especially careful to fully distinguish an impacted hepatic flexure, an impacted supracolic duodenum, or the fundus of the gall bladder from the kidney. It is sometimes quite easy to mistake one of these for the kidney, if the palpator is one of limited experience.

When the displaced kidney is located, and is found to be floating, it will, of course, be the first object of the Chiropractor to replace it. Great care is necessary in freeing it from its temporary adhesions, and sometimes it is best not to loosen it at the first attempt, and indeed, it is usually better to proceed with the matter of releasing the kidney from its temporary adhesion very slowly, releasing it a little at the first time, and addressing attention to it at the second or third subsequent

times, for releasing the kidney from its adhesion always produces the most profound excitement in the patient, and prolonged effort to release it frequently results in utter prostration and sometimes complete unconsciousness.

When the kidney has been released from its temporary adhesion, it must be carefully palpated back to its seat, which must, of course, follow the actual path of its descent. The Relator, of course, knows the seat of the kidney, and his force must be applied to it in a general way on the part opposite to that seat, which will cause it to move slowly through the folds of the mesentery toward its position.

No real force must be projected upon the kidney in securing its return to its place, for such conduct might result in rupture of small blood vessels and hemorrhage.

When, by gentle palpation, the kidney has reached its seat, it should be pressed into place with considerable force. This should be done each time the kidney is corrected in its position, for the purpose of producing at the seat of the kidney slight irritation, for the purpose of superinducing the capsule to readhere in its normal position.

In order to properly secure the replacement and restoration of the capsules of the kidney the patient should be induced to take to his bed for several weeks, and while in bed the patient should be thoroughly exercised daily in all the muscles of the body equal in extent to walking a mile or two. All such exercise should be given while the patient is lying upon the back by the process of tensing the muscles and elevating the feet and arms above the body.

In addition to the exercises indicated, the nurse or attendant should sponge the patient's body following the exercise, and follow the sponge with a dry-towel rub, and thorough and careful massage, as this character of care will tend to the equilibrium of transportation, and to check muscular constriction and fixation.

During the whole of the time that the patient is in bed, he should have thorough Chiropractic correction and relationship each day, which should be performed in the early part of the day, in order that the excitement, which always follows the application of relating to a floating kidney patient, shall have fully worn off before sleeping time at night. In some cases it is advisable to free the heart and brain nerves just before the patient's time for sleeping.

Before taking the patient out of bed to perform relating, a band about a foot wide should be placed around the body, the kidneys having first been carefully placed, and drawn tight in such position so as to extend three inches above the normal seat of the kidney, and four or five inches below, and under the bandage in front and below the kidney a pad of cotton should be placed in such manner as to insure that the kidney shall remain in place.

After the relating process has been completed the patient should be returned to bed and laid flat upon the back, and the bandage be removed, after which the Chiropractor should see to it that the kidney is in its seat, and should put some pressure upon it to make sure of that fact.

During the early part of the patient's lying in bed, he should lie as much of the time as possible upon the

back. Later he may turn upon either side for rest, and after two or three weeks he may rest lying upon the venter.

When it is supposed that time enough has elapsed for the kidney to be readhered in its seat, testing may be made by having the patient sit, observing if the conditions are favorable. If the kidney does not descend the patient may go about, carefully and gradually increase exercise each day, until he comes back to normal conduct.

During all this time, while the kidney is cohering in its seat, the pathway through which it descended should be deeply massaged, for the purpose of breaking up the inviting relationship of the viscera, and to change the tissue habit and conduct in that area.

The most disastrous thing in connection with floating kidney is the fact that therapeutists frequently make very adverse diagnoses of other phases of abnormality which the patient does not have, and this is especially true with regard to the female. As strange as it seems therapeutic doctors are generally unable to detect that it is a case of floating kidney, and therefore, arrive at the diagnosis of appendicitis, inflammation of the ovaries, etc.

Fully ninety per cent of laparotomies performed upon the female in the last twenty-five years are for supposed abnormality of abdominal viscera that really does not exist; the symptoms causing the diagnostician to make the mistake, being those arising from the irritations of movable, or floating kidney.

Relating in a case of movable or floating kidney it can be seen is really of a very comprehensive nature, and

may be the correction of any distortion that can occur. Nothing more can be said than that paramountly the displaced viscus must be restored to its place; the care and attention that has been detailed given to the patient in connection with the greatest care in diet, particularly requiring a very light and simple diet.

The specific relating, of course, is to correcting the distortion at the eleventh and twelfth thoracic nerve trunks, and to correct all other distortions, and break up and check as far as possible the continual tendency to motor reaction, constriction and fixation.

CHAPTER XXXIII

KIDNEY ABNORMALITY—COMBINATION

Bright's Disease—Nephritis—Diabetes

As a sequel to the regular and more usual phases of kidney abnormality there occur two widely separated phases of adverse conduct called Bright's Disease and Diabetes, which will be discussed in this chapter. These phases of abnormality, the student must understand, are a combination of glandular, liquid transportation, and gastro-intestinal.

In these phases there is always a general, adverse, glandular condition of practically all of the ductless glands, and ductile glands of the body.

Accompanying the general gland abnormality referred to, there are certain phases of abnormality of the respiratory organs, more particularly superinduced by abnormality of the glands contained in and along the tubular structures, and also abnormality of the alimentary canal, particularly as to its glandular aspects.

In order to get a complete understanding, and be able to view the situation comprehensively, the student should here read carefully again the chapters on Gland Abnormality, and Combination Abnormality in this volume.

BRIGHT'S DISEASE—NEPHRITIS

This phase of abnormality is usually discussed in these days under the name Nephritis. Back some thirty

years ago, the word Nephritis was not heard, but the common term was Bright's Disease.

In this day there is a strong and general tendency in the therapeutic world to get away from plain and simple language and statement as much as possible.

In the simplest form that the proposition can be put, Bright's Disease or nephritis is a shifting process of tissue abnormality which really amounts to consumption of the kidneys.

The therapeutic world has made much mystery of this phase of abnormality, because it does not understand the cause of it, and does not understand how the phase occurs.

Bright's Disease is always a critical phase of abnormality. It may be, and frequently is, an acute phase of chronic abnormality, but the tissue process designated by the name Bright's Disease never occurs except after the tissues of the kidney have been gravely abnormal for a long time, or are congenitally or hereditarily abnormal as a result of adverse tissue tendency.

The cause of the adverse tissue process under discussion relates peculiarly to the production by the liver, peculiarly influenced by the abnormality of the spleen, of an excessive and abnormal uric acid, which has placed upon the kidneys the burden of an unusual function for a long time, under which burden the tissues of the kidney finally reach the adverse and inflammatory process which present some of the phases of so-called Nephritis.

For convenience of classification the adverse tissue condition may be divided into the acute and chronic phases, but the student must remember that the basic tissue condition is always pronouncedly chronic.

The so-called acute phase begins suddenly by a sense of pronounced chill with great weakness and prostration, frequently accompanied by nausea, and practically always with severe headache, or dull, heavy pain in the head. There is usually marked pain in what is ordinarily called the " small of the back," that is, in the muscles behind the kidneys, accompanied by pain radiating down the legs, and up the vertebral column.

The elevated temperature is always of a pronounced type, corresponding to the chill. The outward temperature does not appear to be high, but there is every indication of pronounced internal and general heat. The tissues of the face and head are usually slightly swollen, greatly congested, and the skin is of a copperish-red, the eyes being congested and bloodshot.

At this phase of the process all of the motor reactive centers are violently constricted with grave occlusion to the brain, heart, stomach, liver and to the extremities, especially affecting the body from the eleventh thoracic trunks down; so much so that quite frequently long before the final result the patient loses the use of the legs, and is frequently affected by stupor or coma.

Because of the pronounced inflammation of the kidneys, there is very little urine excreted, although there is an almost constant impulse to urinate. The fluid passed is of a deep reddish-brown color, and presents a very pungent odor.

Toward the final stages of a fatal case, the odor of the urine passed is much like that of fresh blood mixed with urine, which it really is, for at this stage capillary hemorrhage is taking place in the kidney tubules.

In a few days, or perhaps hours, a marked dropsy

begins to occur in the feet and soon reaches to the abdominal cavity, and gradually fills that cavity until the patient dies from occlusion, resulting from irritation, motor reaction and columnar constriction.

In the phase of abnormality just described, what is to be done for the patient must be done quickly, for the process goes to a fatal termination with much speed unless checked.

If, before the consumption or disintegration of the kidney has progressed too far, application of the principles of Chiropractic are addressed to the adverse process, it can be stopped, and recovery had.

If, however, the tissue disintegration has gone too far, which means that there is not sufficient machinic structure left to perform the necessary eliminative office, the case will be fatal.

In the so-called acute phase no food of any kind should be administered to the patient. The bowel should be thoroughly cleansed by a colon tube enema, administered two or three times the first twenty-four hours, and thereafter each twenty hours, as long as the condition of the intestine indicates the need for it. The normal volume of liquid of the body should be kept up as much as possible by normal salt solutions injected per rectum. The patient should frequently be given small quantities of water to drink.

The patient should be kept in a room from which bright light should be shaded, and in which the temperature should be maintained at about eighty degrees, so that the body can be kept practically nude. The patient's body should have moist friction once each twelve hours, and should have relating about three times

a day the first two days, and thereafter according to symptoms.

So-called chronic Bright's Disease finally results in the same conditions as the acute, but may be many months, or even years, in accomplishing the adverse tissue effect.

The adverse tissue condition in this phase is brought about by a slow, low, continuous inflammation of the kidney; the adverse chemical changes taking place gradually but finally reach the same condition as described in the acute phase.

In the phase under discussion the patient is frequently able to work up to within a few hours of his death. Usually, however, as death approaches there is a short period of acute symptoms, in which, however, none of the phases are marked as they are in the acute process.

The chronic phase, of course, is very much more difficult to remove than the so-called acute. This would not be true if at its incipiency the principles of Chiropractic were applied, but such cases seldom come to a Chiropractor until the symptoms indicating a fatal termination begin to present themselves, when of course the result is rendered very much more doubtful.

However, the whole matter is determined by the rule laid down under the acute phase. That is, if there still remains sufficient of the kidney tissue to perform the eliminative office of the kidney, and the other glands of the body have not undergone too great deterioration, recovery can still be made by the application of the principles of Chiropractic.

The student must remember in this connection, however, that always in such cases there is a gravely adverse general glandular condition of the organism to correct,

and he must, therefore, not be too sanguine or expectant. He must, however, do for the patient everything of which the situation permits.

Relating to remove so-called Bright's Disease, of course, is paramountly an address to free the kidney nerve trunks, but as has been indicated, correction will go very much more widely than this, for release of the brain, heart, and respiratory nerves is just as strongly indicated as are the nerves to the entire alimentary canal, and incidentally to the correction of glands everywhere in the body, so that the matter rests in the sound judgment of the Chiropractor, and not much can be definitely stated in the abstract.

DIABETES

Diabetes is the name of a phase of abnormality which is usually considered under two heads, which have received the designations, diabetes insipidus and diabetes mellitus, which really means diabetes in its beginning stages, and in its advanced stages.

Therapeutists conceive it as being separated into two phases, in the first of which its pronounced symptom of excessive sugar in the urine may be lessened or removed by stopping the ingestion of sweets, and the second phase in which dietetic changes do not effect the lessening of the sugar in the urine.

Any attempt to name or designate characters of diabetes is futile, because it is a shifting, changing tissue condition, and once begun continues to a fatal result, unless some assistance is brought to the rescue of the organism.

The phase of abnormality under discussion was

named from the therapeutic supposition that the pronounced and paramount symptom is always that of finding what they have called grape sugar or dextrose in the urine.

The student will not understand this phase of abnormality unless he also understands what is stated in the chapters on Gland Abnormality, and Combination Abnormality, herein, and he is referred to those chapters now.

In the general, glandular abnormality of the body, and peculiarly the abnormality of the spleen and liver, in which an abnormal and excessive glycogen is produced, accompanied by a uric acid of a nature to prevent the assimilation of glycogen into tissue, the phase is presented that is now being discussed.

Of course, in connection with the glandular abnormality referred to in the preceding paragraph, the pancreas is always abnormal, and in its ductless office exercises an influence upon the liquids of the body, adversely affecting assimilation.

The bile from the liver, and the pancreatic juice from the pancreas are both gravely abnormal as to consistence, and therefore, seriously affect the process of digestion, and as markedly affect the process of absorption.

Not only is the process of absorption gravely affected, but the chemical consistence of the substance absorbed is markedly changed, and frequently rendered destructive.

The substance found by urinalysis in diabetes, of course, contains a substance analogously like grape sugar, but it must be remembered that it is produced in the liver, and it is immaterial what drugs or diet are

administered, unless the conditions of the liver are amended, it continues to be produced, and its production increased. Diabetes so-called is always the result of prolonged, functional abnormality, and incidentally it always follows a prolonged inflammatory condition of the liver, and a shorter inflammatory condition of the kidney.

The inflammations referred to in the preceding paragraph are not of the type that are recognized therapeutically, but are of sufficient gravity to greatly lessen the cohesion and general tissue consistence not only of those glands, but of the tissues of the body generally.

It is impossible to tell by urinalysis how much of the abnormal sweets are being discharged from the body, because it can never be known how much is being passed in the feces, from the lungs, and through the skin.

It is a fact that therapy does not seem to attach much importance to or know that there is constantly being excreted in the urine a certain amount of sweet substance which is found as a symptom of diabetes.

The dietetic habits of the people, in which there is such a pronounced excess of sweets used, result in the necessity for the elimination through the four depuratory channels of an excess of sweets, which cannot be used in the economy of the body.

Of course, it will be understood that the heaviest burden of eliminating the excess, resulting from ingestion, falls upon the kidneys, and because thereof, their resistance is frequently overcome, and expresses itself in the symptoms of diabetes.

In the advanced stages of the prostration of the kidneys, those parts that should separate urine particles

from the lymph fail to do so, and the walls of the uriniferous tubules are so relaxed and flaccid, that lymph, bearing glycogen in excessive quantities, pours through them, frequently to the extent of several gallons each day.

It must be borne in mind that the lymph that thus passes through the kidneys is the nutrient lymph that should not only furnish tissue substances to the kidneys for assimilation, but should carry the residues and disintegrated matter back to supply tissue substances and by-products to other parts, and to other eliminating channels for the depuration of the debris.

Consequent to the failure of the lymph mentioned to be returned to the body, and because of the waste of the nutriment through the kidneys, assimilation is greatly lessened throughout the whole organism, which soon becomes thin and anemic.

At the occurrence of the phases just mentioned, the patient will notice that he is weak and without ambition, and it is with great difficulty that he brings his mind to the performance of ordinary tasks. He will find that he has an inordinate appetite, and that there is almost an irresistible desire to drink water.

Shortly after the phase mentioned in the last paragraph it will be observed that there is a dropsical tendency in the feet and hands; that the gums are pale and flaccid, and the teeth loose in the alveoli; that there is a congestion in the capsules of Tenon, so that the eyes protrude and the lids are baggy and flaccid.

The symptoms last mentioned are the indication of the graver phases of so-called diabetes. Incident to this phase of the process the appetite for both water and

food becomes uncontrollable. The patient is not only weak throughout his whole body, but is weak mentally, and usually cross and sullen.

It will be seen that so-called diabetes is always a chronic tissue condition, and that anything like careful diagnostic attention to the body would have disclosed its approach long before it takes on the phases that have been therapeutically assigned to it.

In this connection it must be remembered that if Chiropractic was a generally used system, no such tissue condition or functional phase as diabetes could occur, and no such phases of abnormality do occur in those who have adopted Chiropractic as the system to be applied for the removal of their adverse situations.

So-called diabetes, if advanced to such a stage that any of the large glands have deteriorated so that there is not sufficient tissue left to perform their functions, is a fatal process. At any time before that the patient may be recovered. After that phase of the situation has occurred recovery will be doubtful, and in the graver phases impossible.

Therapeutically, diabetes is classified as a fatal disease, but this fact should not influence the Chiropractor to any extent, because much can be done for the patient by the application of the principles of Chiropractic, which can not be done by any other system.

The thing of prime importance to the Chiropractor in handling a case of diabetes, is to secure the proper conduct dietetically on the part of the patient. The patient needs nourishment, but cannot obtain it through the ordinary means of feeding.

The paramount thing needed in the patient's body is an opportunity for glandular rest and regeneration. A rebuilding process can never be accomplished while the debilitated glands are put to the necessity of functional work.

In anything like the earlier stages of diabetes the first thing to insist upon is complete abstinence from food. If the patient frets under this regime, he may receive the administration of strained vegetable broths, given hot, with sufficient paprica and salt to render it palatable. However, it is very much better that the patient have no food at all, for all the way from a week to three weeks.

The intestines will be found to be in bad condition as a rule, and should be thoroughly cleansed by irrigation and the volume of the liquid body should be kept up as much as possible by normal salt solutions injected per rectum.

In connection with the dieting of a patient suffering from this phase of abnormality, it must be remembered that there is no proof that the administration of sweets produces sweets in the body, and that there is also no proof that starches produce sweets. In cases where any food is administered, the patient should be fed for tissue nourishment, and the diet must be a sensible one, and the result of it can only be told by noting the symptoms of its effects.

In cases in which fasting on the part of the patient is insisted upon and secured, if the patient frets too much, it is permissible to let him hold some kind of hard candy in the mouth, letting it slowly dissolve, and swallow it. It has been found by careful observation that

this does not increase the sweets in the body, but tends to their reduction.

Relating in diabetes, of course, consists in an address for release of the twelfth, eleventh and tenth thoracic nerve trunks, but will in addition to these require a constitutional supervision with paramount attention to the fifth, sixth and seventh thoracic trunks; the nerve trunks of the brachial plexus to the brain, heart and respiratory system, and a careful local attention to all glandular areas of the body. The corrections indicated should not be administered at once, but must be applied in such way as to produce a general tendency to constructive improvement.

No case of either Bright's Disease or diabetes should be turned away by the Chiropractor, but he must have well in mind the limitations, and in the advanced phases of either of these processes must not promise too much, but should exercise his highest skill and best judgment.

CHAPTER XXXIV

CONTAGION IMPOSSIBLE

From the mysterious dogmas of the past there has descended, even unto this day of enlightenment, a theory and belief that disease is contagious.

This strange, strained, and impossible conception is hugged to the consciousness of perhaps ninety-five per cent of the human family.

The remarkable part of the situation rests in the fact that there is not one scintilla of evidence tending to sustain the proposition of contagion.

The belief in the possibility of contagion rests solely upon the remarkable fact that human beings know more about any and every other thing than they do about the human body. The average human being knows of nothing more mysterious than his own body.

The remarkable thing about the statement last made is the fact that, while the average human or even the intelligent human believes his body is the greatest mystery, still he makes no definite effort to solve that mystery, but with regard to the body accepts without question almost any ridiculous theory presented to him by any one who assumes to understand.

A few simple propositions must be investigated before one can scientifically take any definite position upon the matter of the possibility of contagion.

Before a sane person can believe in the possibility of contagion, he must have reached the conclusion that disease is an entity, or that diseases are entities.

In other words, before a person can legitimately reach the conclusion that a disease can be transmitted from one human being to another, he must first establish in his mind the belief in the individuality of disease, for it is most overwhelmingly conclusive that unless there are such things as disease entities, or individul diseases, there can be no such thing as the transmission of them.

The therapeutic world never having understood the functioning of the nerve system, never had opportunity to understand the cause of disease, and therefore, has some excuse for its erroneous conceptions as to the entification of the disease; but for Chiropractors there is no such excuse, and no Chiropractor can be heard to plead ignorance as a mitigation for belief in contagion.

To the student engaged in a study of the actual truth respecting the human body, regardless of the ancient theory and dogma, there is no more impossible conception than that there are diseases or that there are disease entities. Such students know that disease is one thing, expressed in a multitude of phases, and, therefore, that transmission of a phase of disease is an impossibility.

Actual, irresistible, indestructible fact usually, however, has small weight with the human family when it is made to confront a religion founded upon theory and mysticism, and that is the situation that students, uncontrolled by anything but fact, must meet and deal with in their present efforts. However, there is one glorious ray of hope that shines in, and that is, facts continually presented displace theories, faiths and mysteries.

Facts pertaining to disease will eventually wear away

the mysticism and dogma of contagion. It cannot be expected to occur at once. It cannot be expected to occur until that portion of the human family, dealing with the subject of disease, come to understand that there is no such thing as disease entities, and therefore, that there can be no such thing as contagion.

The fact is, that if contagion was a possibility, every contagious disease must have been caught somewhere, and since there must have been a time when there was no one from whom to "catch" the contagious disease, the proposition of contagion fails. This fact has had small weight with the human family.

If there is now, such a thing as a contagious disease, in order that it could exist as such, it must always have been a contagious disease, and if it was always a contagious disease, the first human being that had it, had to catch it somewhere, and if there was no human being who had it, then it could not have been caught, and if it could not have been caught it is not contagious.

The argument is plain, but not five per cent of human beings have ever thought of it, or would give it a moment's consideration if they had.

To tell the ordinary human being that there is no such thing as contagion; to tell him that a so-called contagious disease must have been caught originally, and since originally no one had it, it could not be caught, only serves to wring from such individual the statement, "My doctor says that so-and-so disease is contagious. I do not know." This statement in the face of the absolute impossibility of such a thing!

The criticism made is that in matters pertaining to the human body, its health and disease, human beings

revert to the religion of relying upon what their doctor says, and not upon their own sound common sense. To illustrate: persons will drink unfermented grape juice, because a doctor advises it, when they are troubled with gas productions in the stomach, notwithstanding the fact that they know better than anybody that a fresh fruit juice, disassociated from its pulp, will ferment quicker, and produce more gas than almost any other substance. If they wish to allay gas in the stomach they must take the fruit juice, after it has completely fermented, thereby excluding its fermentation gases.

The fact is that persons can be poisoned, and yet reactions upon a specific poison are only phase-like in type, and are not specific reactions.

To illustrate the statement made in the last paragraph: twenty persons, each taking two ounces of whisky from the same receptacle will present twenty different phases of reaction, because they represent twenty different chemical formulae.

Chemists have long sought vainly to secure specific, functional reactions, but have failed most pronouncedly, and will always continue to so fail, because each human being will always represent a specific chemical formula, and will react upon any poison injected into him exactly in correspondence with his individual formula, which will be to that extent different from the reaction of any other human organism.

The fact that persons can be poisoned, and in a sense typically react upon that poison, has furnished the whole foundation for the mystery of so-called contagion. Persons living in the same environment and atmosphere are poisoned in the same way, and those whose chemical

formulae are of the nature to respond, react somewhat typically upon the particular poison, and society at large proclaims another demonstration of contagion.

To make the subject specific, inoculation is the process we are discussing. The word inoculation signifies " to inject into," and a poison is injected into a person no matter whether the injection is accomplished by the use of a needle, by scarification, or by inspiration, ingestion or endosmosis.

In other words inoculation has been accomplished when poison *per se* has been introduced into the animate structures of the organism, no matter by what process or by what means.

It is perfectly clear that if a person is inoculated with a ptomaine, he typically reacts upon that poison, and it is just as clear that if he is inoculated by some unknown miasma arising from the earth or accumulating in certain circumscribed areas in the atmosphere, he will just as readily, and just as specifically react upon that poison.

There is overwhelming proof that toxins emanating from the earth, and accumulating in the atmosphere in certain localities, at certain times of the year, do inoculate persons, and sometimes very extensively, who happen to be living in those localities.

Sometimes there is a toxin which accumulates in the atmosphere, or from the earth, which seems to be quite general, for it inoculates persons very widely over the face of the earth. This occurred in the so-called Spanish Influenza epidemic which took place in 1918. There is little or no question that the toxin which caused the peculiar reaction called Spanish Influenza was a peculiar chemical formula in the atmosphere.

The paramount proof of the statement in the last paragraph is the fact that not all persons reacted upon that poison. If so-called Spanish Influenza had been contagious the whole human family would have succumbed, but only those succumbed in whose organism a negative condition of the right chemistry had been produced, and this preparation had been made in those persons by a long, hot, dry summer that had preceded.

The belief that so-called Infantile Paralysis is contagious is quite general, notwithstanding the fact that it is now well known that infantile paralysis never occurs except when an incipient and pronounced distortion in the pelvic girdle produces exactly the right adverse influence upon the nerve system, setting up a reactionary condition that may only serve to influence the muscles and tissues of a leg, but usually of the leg and arm on the side of the injury.

There has been an effort on the part of serum and vaccine commercialists to cause it to be believed that germs are the cause of disease, and that vaccines and sera transmit germs, all of which is most damaging and fallacious. There is no serum nor vaccine which contains any germs. Therefore, when understood, these propagandists lend their force in substantiation of what has already been said—that poisons produce typical reactions.

In other words, if diphtheria antitoxin is inoculated into an organism, that organism reacts upon it, and if sufficiently virile produces an array of scavenger germs, to aid not only in the reduction of the antitoxin, but the morbidity produced by it, and the phase of abnormality the organism was undergoing before the injection.

The same thing as just stated with regard to antitoxins is true of all of the sera and vaccines now forming such an extensive part of our degradation commercially.

In the statements that have been made in this connection, there is no desire on the part of the author to avoid meeting the fact that if a person has developed a condition of great negativity in himself, and therefore, of recipiency to a characteristic toxin, and has just about reached the point where his resistance is overcome, that to bring him in contact with another person, who is eliminating from his body a great deal of that characteristic poison, might, and probably would, be sufficiently inoculated by it to immediately lose his resistance, and react upon it and the characteristic toxins of like character in his own organism.

The situation just detailed, however, would only furnish proof of the truth of inoculation, and would in no manner refer to, or sustain the proposition of contagion.

In other words the human organism may be overcome by the inoculation of poisons, and it does not make any difference where those poisons come from, whether from the bodies of other persons who are emanating poisons, or from accumulations of poison in the atmosphere, or emanations from water or from the earth. The fact remains the same that if the person succumbs to the poison, he is succumbing to the inoculation of poison and not to contagion; for if he succumbs to contagion he must have taken a disease from another to himself completely and *in toto;* whereas, if he had only succumbed to inoculation he has only received from some source a sufficient amount of poison, which, combined

with the poison already in his own organism to overcome his resistance.

The final proof of inoculation, and defeat of the theory of contagion, however, rests in the fact that any poison inoculated into the body, or elaborated in it, tends to be neutralized and eliminated, and if the body is sufficiently virile will be wholly neutralized and finally eliminated.

In consonance to the facts just stated there is no phase of contagious disease a person has had once, but what, under the right circumstances, he will have again. In other words, there is no phase of so-called contagious disease that the records do not show persons to have had all the way from twice to many times. The author has known one person in Oklahoma to suffer from measles three times in the same winter, and has known persons to have small-pox two and three times; to have so-called gonorrhea several times and syphilis twice.

If immunity was a possibility, the quickest way to produce it would be by the injection of the virus of the disease itself, but since there is no disease that presents a toxin that prevents its own recurrence in the same organism, therefore it is perfectly clear that no serum or vaccine will ever be produced that by inoculation will cause immunity, either against that same kind of poison, or against any phase of disease.

To put the matter in its most concrete form, if even small-pox will not prevent a recurrence of small-pox how can varioloid from vaccine prevent small-pox? If even syphilis will not prevent re-inoculation of syphilis, what serum can produce such immunity? In this phase of the proposition, the whole matter becomes disgustingly laughable.

One further fact as a suggestion to the common sense. It is well known that toxic poisoning takes place by inoculation in those whose organisms are sufficiently loaded with the peculiar morbidity that renders them non-resistant to ivy and other woodland poisons, for it is known that such persons riding through the woods in the spring, without touching anything, will immediately enter upon the process incident to that character of poisoning.

In view of the statement last made, it is not thought that ivy poisoning is contagious, or that ivy poisoning is a disease, or that any other woodland poisoning is a disease, but in this simple matter the human family uses its common sense, and knows that the result is but a typical reaction upon poison. But they fail to make adaptation of this fact to the general process of inoculation, and of the development of inoculatory phases of disease.

If the commercial aspect was eliminated from the proposition of vaccines, antitoxins, and all characters of serum injections, the promulgation of them, and the belief in them would pass from the human mind forever in less than a decade. But the fact that the fad of such inoculations furnishes a lucrative business explains the whole matter.

The human family will not endure this character of abuse much longer; for in the past fifty years the human family has progressed very rapidly in the investigation of the human organism, has more and more appropriated to itself the privilege of applying common sense to these important matters, and when liberty has been attained along these lines, not only will the imposition of

vaccinations and serum injections pass from society, but with them will go the belief in contagion, and the belief in the fetish of the entity of disease.

Just a few remarks to bring all that has been said in this chapter down to practical application, must here be made, notwithstanding that it is a direct criticism of the mysticism and misconceptions of therapy.

Colds have been held to be contagious, notwithstanding that it is a well-known fact that colds occur in epidemic form incident to remarkable changes in the atmosphere or general weather conditions, and incident to nothing else. Of course, the toxins of colds result in the production of scavenger germs, and it must be remembered that only those persons have colds who present a chronic non-resistance.

Mumps, whooping cough, rubiola, measles, chickenpox, smallpox, scarlet fever and diphtheria are held to be contagious, but it will be observed that these only occur in persons who have produced a typical, adverse toxic condition; mumps only occurring in those who present negative conditions of the racemose glands; whooping cough in those who have negative conditions of the esophagus; rubiola in those who have chronic kidney disease, and the same is true of measles, except that in such phases the chronic kidney phase is worse.

Scarlet fever occurs in those whose kidneys are chronically abnormal as a matter of hereditary tissue tendency, aggravated by sex anomaly, and the same is true of diphtheria, only in diphtheria the irritation from sex anomaly has produced a marked negative condition of the tonsillar ring, especially the true tonsils.

Typhoid fever is a combination abnormality of the kidneys, liver and intestines, but could not occur except these tissue conditions were chronic. Sore eyes are most frequently superinduced by kidney abnormality, aggravated by anomalous sex orifices, and these adverse situations prepare the way, and constantly prepare the tissue, for venereal disease. It cannot be doubted by those well informed that no such a thing as venereal disease would have existed in the human family if it had not been for the irritation and consequent reaction upon the human organism incident to the anomalous sex orifices.

In all of these phases, and many others, the value of Chiropractic is in the sense of a prophylactic. In other words, in its ability to prevent disease, which is accomplished by keeping all of the nerves free from interference, generally called occlusion. The highest and surest form of immunity is that condition which results when all of the nerves are free, and when the radiation of stimulus is unimpeded; when respiration, digestion and absorption are being performed in proper amount and time; when aeration is taking place unobstructedly; when extrusion of the right substances is being made in right amount and proper time, so that assimilation is unimpaired, and when physiologic disintegration is being accomplished without interference, and when depuration and final elimination are keeping exact pace with all of the other phases of process. In other words, when elimination is holding its proper ratio to raw material intake.

In the ideal condition just stated, there can be no doubt that the human organism would be absolutely

immune from all inoculatory influences, and would, therefore, be immune from all phases of abnormality or disease, and this is the grand ideal toward which Chiropractic is always striving.

CHAPTER XXXV

MALARIA

Intermittent—Pernicious—Intermittent—Remittent—Yellow Fever—Bubonic Plague

The word malaria simply signifies "bad air," and it has always been the thought of therapeutists that the disease called malaria was caused by "bad air."

It is indeed a grave question whether the adverse tissue condition called malaria comes from bad air, or from an emanation from the earth, and incidentally from drinking water.

The evidences surrounding the malarial situations strongly indicate that the adverse tissue condition is superinduced by a combination of emanations from the earth miasma in the air, and substances in the drinking water.

Therapeutists have speculated much upon the cause of what they call malaria, and they have unhesitatingly announced that it is a miasma that emanates from the earth in certain, low, moist and warm climates. It has also been contended that malaria is the result of a vegetable organism that enters into the body of certain individuals, which causes the adverse tissue condition.

The last announcement from the therapeutic world is that certain mosquitoes transfer malaria by their stings, but in this view of the situation they do not stop to explain where the mosquito of this type originally got

or found malaria, nor where he gets it in the present instance.

One difficulty about the miasma theory is that malarial localities can not be marked out purely from their topographical situation, for there are many localities in which all of the conditions that would indicate malaria are present, in which areas no malaria occurs, and, on the other hand, there are localities in which malaria from the therapeutic conceptions would not occur, in which this adverse phase is almost constant.

Notwithstanding the last observation, however, it is perfectly clear that the irritant that produces the adverse tissue condition by the reactions of the organism upon it, is incident to climatic conditions, emanations from the soil, and atmospheric chemistry.

Notwithstanding this fact, however, only persons who are suffering certain phases of abnormality are subject to this phase of adverse, tissue condition.

No one has ever been observed to present the adverse tissue process called malaria, who has not for a long time been subject to pronouncedly abnormal, glandular condition, peculiarly of the spleen and liver with the concomitant of abnormal intestine.

Persons presenting the adverse, glandular conditions just described, living in localities where the untoward conditions in this chapter enumerated apply to them, will at certain seasons of the year, when the adverse conditions reach their irritating height, fail in resistance, and suffer the symptoms of so-called malaria, and when the irritations are less at other seasons will not be so pronouncedly affected, but will be malarial subjects the year round while living subject to such irritations.

It cannot be doubted that persons who are negative as to the glandular conditions mentioned might very easily have their resistance overcome by the irritation from the sting of mosquitoes bred in the filth of malarial environment, to such an extent as to overcome their resistance. Yet it must be remembered that this fact fails entirely to account for the production of the poison or virus which is the irritating cause of malaria.

In connection with the thought just expressed, it must be remembered that in the Canal Zone in Central America, and in other localities that have been the environment of malaria, cleaning up the conditions which caused the mosquito, and keeping those conditions so sanitary that mosquitoes cannot breed, has removed the virus of malaria, and has made of those areas healthy communities, which fully proves that the poison, or virus, which superinduces malaria exists primarily to the breeding of the so-called malaria transmitting mosquitoes.

Persons presenting the chronic, glandular abnormality indicated in this chapter should not live in localities where they are subjected to the virus or miasma of malaria, but should move into countries where it is known that such conditions do not exist, unless, by securing sanitary conditions, the adverse conditions can be eradicated.

The adverse tissue condition called malaria presents itself under several phases, the symptoms of which typical processes, will be described in this connection.

Intermittent fever is the commonest phase of malaria, and appears under many different names in different localities. It is commonly called ague, chills, shakes, swamp fever, and so on.

The symptoms of this phase are so familiar to most people that no extended discussion need be made. Of course, the tissue condition is chronic, but the onset of the acute phase is usually by a very peculiar and pronounced chill. Concomitant with the chill the skin is dry and constricted, presenting evidences of venous and lymph congestion. These are not only presented in the head and eyeballs, but at all of the extremities, which feel cold, and present a marked, blue color. This will be especially true around the lunula of the finger and toe nails.

Incident to the chill, the temperature begins to rapidly rise, and the fever usually becomes quite high. The sense of extreme chill remains until the fever has arisen to a considerable height, when it begins to disappear but the sense of chill does not completely cease until the fever has reached its maximum.

At the termination of the sense of chill there occurs what the therapeutists have called the "hot stage," which may last from one to several hours, and sometimes accompanying it there are nausea and vomiting, with marked pain in the eyes and extremities.

After a time the vertebral and other constrictions, which are caused by motor reaction from the irritant or accumulation of toxins in the organism, begin to relax. So soon as this occurs stimulus is released, and the temperature begins to rapidly descend; the skin opens, and then begins what has been therapeutically termed the "sweating stage."

During the sweating stage the patient's body and clothing will be saturated with a profuse discharge from the skin, during which process a sufficient amount of

toxins are eliminated from the body to defer a subsequent acute attack or returning chill for a considerable period of time. In other words, the fever wholly disappears, and the sense of chill, because of the elimination of the toxin, and the patient feels that he is recovered.

The period of intermission between chills differs markedly in individuals. In some the malarial toxin accumulates so rapidly that it may be only a few hours or a day or two until the acute attack returns, and all of the process as described will be gone through again. In others it may be many days or weeks before a sufficient accumulation of toxin will occur to again overcome the resistance of the organism.

Cases have been observed in which one or two chills followed by fever would be all that would occur during the pronounced malarial period of the year, but these would continue each subsequent year, generally becoming more numerous as the patient lives longer in the adverse environment.

The symptoms so far described have been those which occur where the patient receives no assistance, or perhaps with therapeutic treatment, for therapy has never found a remedy for malaria. Quinine has been much exploited, but quinine has never been known to remove malaria. The author has had a sufficiently complex experience of that kind himself to personally know the facts of quinine in malaria, and has observed it in thousands of cases.

No more adverse thing can be done for a person, who is already glandularly weak, and therefore subject to malaria, than to administer to him quinine, for quinine

particularly and definitely affects the glands of the body and the evidences of those adverse effects can be easily read in the irides. The taker of quinine only pays for it in many other ways, and under many other adverse conditions.

Under the application of the principles of Chiropractic, the acute phases of intermittent malaria are usually quickly removed. However, the chronic and glandular abnormality, which forms the basis of the difficulty is, of course, slow and difficult of removal, even under the most advantageous circumstances.

It can be easily seen that to restore a patient while living in, and enduring an adverse environmental irritation, is indeed a very difficult thing to do, and the length of time required to accomplish it in any event will always be governed by the adverse tissue conditions.

In this connection it is well to observe that some organisms are so negative, and some adverse environmental irritants are so active, that when the two occur together it is impossible to remove the adverse tissue condition against such an environment.

Diet is always a very important consideration in any phase of malaria, and as to diet the main thing is to reduce the intake to the minimum, and to avoid all substances that require the emulsifying influence of bile, and also substances that readily ferment. This includes milk, eggs, and foods that are too starchy.

Raw, succulent vegetables, coarse, whole-wheat breads, and light, coarse meats, such as beef, are the proper things to select the diet from; constantly remembering that these must be taken upon the plan of the mono-diet, and the patient should use no exciters at all.

Pernicious intermittent attacks of malaria are only a graver phase of the adverse tissue process just described. In this phase of abnormality, the fever becomes continuous, and is frequently very high. It never entirely abates, but the temperature falls markedly at the "sweating stage," and then after a time rapidly ascends again.

In this phase of abnormality, while the sweating stage occurs as pronouncedly, or even more so than the phase before described, the body is not successful in eliminating a sufficient amount of toxin to keep pace with the incoming accumulation, so that even while the sweating stage is coming on, toxic conditions, often arise to such height as to cause the sweating stage to abate incident to the development of a high fever.

Incident to the sweating stage and the sudden rise of temperature, there are all of the pronounced symptoms of chill, which as before remains until the temperature has reached its maximum, when again the sense of chill disappears, and the hot stage continues for a period of time.

Incident to the phase now being described, the bile produced by the liver is very abnormal in consistence, and not infrequently of an excessive amount, and continues to be discharged within the intestine. On account of the marked occlusion of stomach nerves the pyloric orifice of the stomach is frequently open, and the sphincters are sometimes fixed in that position, in which event gurgitation of the bile into the stomach occurs, which produces pronounced nausea and vomiting with many adverse symptoms.

The patient frequently dies from exhaustion superinduced by the constant irritation of bile being

gurgitated into the stomach. It is, therefore, of the very first importance to the Chiropractor in attending a case of this character to sufficiently remove occlusion of the stomach nerves to secure the closure of the pyloric orifice of the stomach, in order that the bile will pass on down the intestine.

Under ordinary circumstances, where the environmental condition is not too adverse, and the patient's tissue condition not too negative, the Chiropractor will be able to very soon overcome the adverse symptoms of the acute phase. This he should be able to do in from two to five or six days.

However, if the Chiropractor follows a physician in the case, he must be cautious, for the drugs administered by therapy in such cases are subject to cumulative reaction under the activity which will be produced by release of occlusion of nerves, and sometimes to secure a cumulative reaction of drugs is very dangerous to the patient.

It is, of course, the duty of the Chiropractor in following a physician to give definite attention to removal of occlusion to the heart, brain and stomach, until he has had time to see whether or not there has been cumulative reaction from drugs, and then proceed as hereinafter detailed.

When the Chiropractor is called to a case of pernicious intermittent fever, it is usual to find the bowels gravely constipated with marked impaction of the lower bowel. In such a contingency he should unhesitatingly resort to enema, and thoroughly clean and irrigate the bowel, so that when the liver reaction begins there will be free opportunity for escape of the accumulated bile and other

debris, for it would be very injurious to have this toxic matter retained in the intestine longer than the time necessary for it to reach the anal orifice.

Diet is most important in this phase of abnormality, and it must be remembered that during the acute phase no food of any kind should be administered to the patient at all. He should be induced to drink copiously of good, soft water, which should be of the temperature of spring water. If the patient frets for food, there might be administered a light, strained broth, seasoned with a little salt and paprika, say a cupful once in six hours. This broth should never be made of anything but succulent vegetables—never from meats—and should be strained free from any particles of solid matter. Later on in the case the lightest and most nutritious substances should be administered, but only as a mono-diet, and in very small quantities.

Remittent fever, so-called, is really about the same adverse tissue condition as that just described, except that the attack is usually by an abrupt chill, followed by a very high fever, which remains for several days, and only remits but does not cease. The remission may be for only a very short time, and it may last for several days.

In this phase of the process generally in a very short time the tissue condition is such that there is a continuous high fever, which remits each day slightly, reaching its lowest register at about four o'clock in the morning, and ascending, reaching its highest registration at about four o'clock in the afternoon.

Incident to this adverse tissue process there are frequently symptoms of grave prostration, with

delirium and sometimes complete stupor. These symptoms are those of that adverse process which has been called " typhoid fever," and have occasioned this adverse process when it presents these marked symptoms, being called therapeutically "typho-malarial fever."

Diet and other suggestions which were given in the phase last discussed are fully applicable in this phase. However, in this phase of abnormality, the greatest care must be observed not to administer any character of food whatever, while there are symptoms of delirium or stupor, and of course no foods that require any digestion, so long as there is any fever.

Ordinarily the Chiropractor will have no difficulty in allaying the fever phases of the tissue condition being discussed, if he is called to the case before it has been medicated. If the case has been medicated it will be much more difficult to remove the acute phases, and of course it will take a much longer time. The Chiropractor must very carefully remember the caution in such cases to look out for adverse, cumulative medical reactions.

YELLOW FEVER

Yellow fever is a very grave phase of malarial fever. It receives its name from the peculiar yellow jaundice that occurs as incident to this adverse tissue process.

Yellow fever occurs only in warm climates, where the soil and atmospheric conditions are substantially those discussed at the beginning of this chapter.

The fact that yellow fever does not occur except in warm climates, where there is an excessive moisture,

and in the vicinity of the ocean, does not in any sense give us the basic toxin that superinduces this phase of malaria.

Persons who are gravely abnormal as to the spleen, liver and kidneys, are the only ones that are particularly subject to yellow fever, and this is true for the same reason that the same character of persons are subject to malaria generally.

The acute onset of yellow fever is marked by chill that does not seem so grave as that of ordinary malaria, succeeded to by a fever that does not seem to range very high. However, the internal heat is intense. There is chill, great pain in the stomach and duodenum as a result of the discharge of abnormal bile. This is usually accompanied with unusual nausea and vomiting and the sense of great thirst. The patient complains of pains in the muscles of the small of the back, much the same as that in small-pox. The intestine is almost wholly prostrated.

State of calm is the therapeutic designation of the symptoms that occur after the fever has continued for several hours to several days, in which, although the temperature is much reduced, there is still considerable fever.

In mild cases the state of calm marks the beginning of recovery, but in graver cases the remission is incident to a new accumulation of toxin, which causes the organism to react upon it, and a very much graver situation is precipitated.

State of collapse is the name given to the succeeding phase to the period of remission, which occurs as incident to the second accumulation of toxin in the body.

In this phase of the process the patient becomes wholly prostrated, and all of the functions are practically aborted. It is at this juncture that changes become very marked, and incident thereto there is hemorrhage to the skin, and almost always into the alimentary canal.

The phases so far described have been based upon no proper assistance having been given to the patient, and therefore, of course, did not contemplate any checking of the adverse process by constructive assistance.

If immediately upon the first symptoms of the adverse phase presenting themselves, a Chiropractor is called, he should have no difficulty in checking the chill, and soon removing the fever, and should have no trouble in preventing the return of the chill or fever. However, it must be remembered that he will encounter and have to deal with a somewhat protracted, glandular reaction, and this will always take considerable time, and will in many instances be fraught with much danger.

In this phase, as in malaria, enema should be resorted to, and if necessary regular irrigation should be established, so that every aid will be given to the elimination of the toxins when glandular reactions are produced.

Diet in this case is strict prohibition of all foods, and no food must be administered until the fever has been entirely abated, and intestinal conduct re-established, when the patient may have hot, strained broths made from vegetables, until all of the functions of the body are completely restored. Of course, incident to this phase of abnormality, it is of the first importance to have the patient drink a great deal of water, and the body can be moistened and frictioned several times a day, if it is found to be pleasant to the patient.

Relating in all of the phases of malaria and in yellow fever are primarily directed to securing release of stimulus in the nerves that ramify the glandular areas of the body, particularly the large glands which are accessory to the small intestine, and to the kidneys. Therefore, of course, the release will be to the fourth, fifth, sixth, seventh and eighth thoracic nerve trunks; the twelfth and eleventh thoracic nerve trunks.

However, the glandular abnormality being general, and the toxic accumulation being general, the Chiropractor will be very particular to give such general attention as will secure the release of nerves to the glands.

As a matter of primary attention, he will always, of course, in the first instance attend to releasing nerves to the heart, lungs and brain.

CHOLERA

This is the remarkable phase of abnormality sometimes called Asiatic Cholera or Bubonic Plague. Therapeutists know very little about this phase of abnormality. It is unquestionably environmental, and always occurs in epidemics. The field of its operation is world-wide.

The symptoms, so far as they have been recorded, show that there is a complete prostration of all of the glands of the body, and indicate that the irritant is a terrific toxin. What it comes from has never been settled. Indeed, its origin is as much a matter of discussion today as it has ever been.

Occlusion is so general that there is dropsy into the alimentary canal, the discharge from which through the

mouth and intestine is called "rice water vomiting" and "rice water stools" respectively. The discharge of the rice water vomiting and stools are the first definite symptoms of the adverse process called cholera. At the beginning of the vomiting, small, solid particles of food that have not been digested, because of the complete absence of the digestive juices, are cast off. Later the mucous lining of the stomach is cast off in the vomit. At the beginning the stools are of the same nature as the substance vomited, being solid particles of food, but later on contain small pieces of the mucous lining of the intestine.

During the early stages of the process the vomiting and purging are very profuse; indeed so profuse is the discharge of lymph from the alimentary canal that the blood is very soon depleted, and becomes thick, blue and sluggish in the veins.

Due to the very rapid dropsy, or escape of the liquids from the body, the tissues soon become emaciated, so that within a few hours after the attack a person of full habit looks emaciated and shrivelled as with old age. This loss is so great that a person of one hundred and sixty pounds will lose thirty or forty pounds weight in twenty-four hours.

Occlusion of the nerves to the heart is so intense that the diastoles and systoles are rendered rapid and feeble, frequently indicating one hundred to one hundred and forty pulsations a minute. The other functions of the body are quickly depleted.

The patient usually remains markedly strong during the first phase of this abnormality, and is able to get up and walk about, suffering no sense of prostration which

approximates the destructive debility he is undergoing, until the approach of the end of the process.

State of collapse is the name the therapeutists have given to the phase of the adverse process when the body succumbs. This situation is presented in a complete prostration, sometimes with coma. Incident to the state of collapse relaxation sometimes occurs, releasing occlusion. The vomiting, stools and sweating cease, and the liver begins to act, discharging a bright green bile, so that the stools that continue are of a bright green color.

When this phase of symptoms occurs the patient is usually on the way to recovery, and if circumstances are right will recover.

State of reaction is the name given by therapeutists to the improved symptoms just detailed. If, however, reaction does not occur in the instance described, the patient very soon dies, for the state of prostration is an indication in such cases that the resistance of the organism has been wholly overcome.

It seems wholly unnecessary to discuss diet in the case of the type under discussion, for it is plainly indicated that no food should be administered. The patient should be induced to take to his bed, and relating should be performed at close intervals until complete relaxation has been obtained, or, in other words, until glandular reaction evidences itself, after which the frequency of relating must be left to the sound judgment of the doctor in charge.

Relating to remove cholera it will be seen must be addressed to releasing occlusion in all of the nerve trunks extending to and ramifying the alimentary canal,

incidentally including all other vital centers. The Relator will have to depend upon his diagnostic ability, but must at all events prevent constrictions from forming, and break up those already in existence.

This phase of abnormality is indeed very grave. Therapy has never suggested any treatment or remedy for it, but if immediately upon the attack the principles of Chiropractic would be faithfully applied, a very large majority of the cases would be fully recovered.

CHAPTER XXXVI

ERUPTIVE FEVER

Roseola—Rubella—Measles—Scarlet Fever
Small-Pox—Chicken-Pox

It has heretofore been stated in this work that there are two characters of fever for discussion, the first being simple, which has already been discussed, and the second eruptive, which must now be discussed.

The distinctive feature of eruptive fever is that concomitant with the adverse tissue condition and process, there occurs, incident to the elevated temperature an eruption upon the skin.

The eruption referred to sometimes occurs at the same time, and in connection with the elevation of temperature, in some cases occurring before the temperature reaches its height, and in other phases the eruption being most profuse at the time the temperature is at its height.

In all phases of eruptive fever, the eruption is but the expression or symptom, pointing out the fact that there has been and is a precipitation of morbidity or toxins in the subcutaneous areas of the body, which must also be understood to be in the subserous and submucous tissues.

The morbidity or toxin referred to in the preceding paragraph would not precipitate or deposit in the areas mentioned, if it were not for the fact that there is chronic, abnormal, glandular, tissue conditions, which function to that result.

Generally the morbid precipitation that results in the eruption, which gives character to the fever under discussion, results from a chronic abnormality of the kidneys, which is usually aggravated by a disordered liver and spleen.

The eruptions that occur incident to fever are all of the acid type, and usually occur because the spleen and liver have been producing too much, or at least an abnormal, chemical compound, which the kidneys have been unable to depurate, and which therefore has been finding escape through the skin, excessively loading subcutaneous areas. Any atmospheric or environmental condition, which has the effect of producing a constriction and fixation of the skin, of such gravity as to result in fever, will usually serve to produce some phase of the various eruptive processes.

Therapeutists usually discuss eruptive fever under three stages as follows: (1) the period of invasion, (2) the period of eruption, (3) the period of desquamation.

As would be expected these three stages will not always be fully apparent, but will generally typically manifest themselves.

ROSEOLA

Roseola, as the name implies, is peculiarly applicable to any rose-colored rash that may appear upon the skin as incident to any febrile condition.

There is not necessarily any distinction between this phase of abnormality and so-called measles, but usually it is the name given to a milder type of rose-red rashes, which occur as incident to many adverse, kidney conditions, occurring as incident to so-called heat conditions.

The invasion in this phase is usually indicated by a slight chill, soon followed by a rose-red rash upon the skin. This, however, is not usually seen in crescentic patches, but is distributed over the area of the acid accumulations.

Roseola usually subsides within a few days without any attention to it whatever. However, it does not always do so, and may require that the patient shall make a radical change in his diet, for usually this difficulty occurs as incident to some grave error of diet.

Usually the eruption in this phase of abnormality is not followed by desquamation, distinctively speaking, and yet in its more active phases there may be a desquamation, especially from the area of the eruption, and in this phase the eruption may be quite circumscribed.

Relating to remove roseola must be directed to release of the nerves to the area of eruption as a primary proposition. But incidentally, of course, release of the nerves to the kidneys and those to the liver and spleen are paramountly indicated.

RUBELLA

This phase of abnormality has sometimes been called " German Measles." It is an adverse process, not dissimilar in ordinary type from that of ordinary measles. The invasion so-called is usually by a not very pronounced chill, followed by a general fever, which does not range very high. Incident to the fever there are inflammatory catarrhal symptoms, accompanied by sore throat, with wandering pains through the muscles of the extremities, and at about this time the eruption of red papules upon the skin of a lighter color than

those of measles occurs, but not in crescentic masses.

This phase is not materially different from roseola, except that the papules are usually more marked.

Ordinarily rubella disappears without attention within a few days, and without desquamation. In this phase of abnormality the same should be said about diet as in roseola, for the difficulty is of a glandular nature, and arises out of practically the same situation as that phase.

Relating in rubella is precisely the same as that in roseola, and therefore, nothing further need be stated.

MEASLES (RUBEOLA)

Rubeola, or so-called measles, is a phase of abnormality that came into existence as an outbreeding of the tissue condition that was originally superinduced through syphilis. The eruption occurring in measles is very typical of that which occurs in secondary syphilis, except that it does not emit such a pungent, rusty odor, and is a bright, instead of a dirty-red color.

The intention of the author is but to declare that if the human family had never suffered the degradation of syphilis, and its devoluting tendencies, there would never have been such a phase of abnormality as measles.

The symptoms of the onset of measles are usually those of deep lassitude, and a sense of inexpressible weakness; pain in the head and eyes, usually sore throat accompanied by pain and weakness in the so-called small of the back, wandering pains through the body, especially the thighs and the legs.

About the time the symptoms indicated in the preceding paragraph become thoroughly manifest, a sense of chill pervades the vertebral column, which is usually

expressed as chills running up the back. This chill usually becomes pronounced, and soon the temperature begins to rise somewhat rapidly, and always rises in ratio with the chill. If the chill, therefore, has been very pronounced, the fever will be very high. If the chill has not been marked, the temperature will not be. Generally the chill is not marked, and the temperature is not very high.

Usually in from two to three days after the first symptoms are noticed, the rash begins to appear; at first upon the forehead and temples, and over the area of the trunk ramified by nerves from the twelfth, eleventh and tenth thoracics.

In some cases the rash upon the face is as far as it goes but sometimes it covers the area of the body described, and in the graver cases extends all over the whole body so that it becomes as red as a lobster.

The rash in measles closely resembles that in roseola and rubella, and also in scarlet fever, except that in measles the eruption is a rusty red, and is in crescentic patches, while in roseola and rubella, it is of a brighter red, and in scarlet fever of a very bright red and not in crescentic patches.

The eruption of measles occurs in raised, welt-like, crescentic patches upon the skin, which at first have the appearance of the eruption of small-pox, with the exception that the eruptions are not hard, and are very much smaller than those of small-pox.

The remarkable difference in the eruption in measles, distinguishing it from scarlet fever so-called, is that the eruption of measles presents a raised surface of skin, which can be easily palpated, while that in scarlet fever does not break the smoothness of the skin.

The rash in measles is accompanied by an itching sensation as a rule, but this is not so aggravated as the same phase in scarlet fever.

The temperature in measles increases during the time of the eruption until the skin loosens, or until the fixation of the skin is broken by the swelling incident to the eruption, which permits the elimination of the shut-in toxins, and recovery from the adverse process.

The loosening or breaking of the skin, permitting the escape of the toxins is indicated by the rapid fading of the color of the rash, concomitant with which the skin opens, and the temperature as rapidly descends.

Incident and subsequent to the rapid dissipation of the temperature, desquamation occurs, and the skin, loosened by the adverse process, rapidly comes away in small patches.

Owing to the fact that in the subcutaneous and subserous areas of the body, there is the same accumulation and discharge of toxins, it frequently happens under therapy, or no assistance, that sight is gravely injured or perhaps lost, and sometimes deafness results.

The most frequent sequel to measles, not having the application of the principles of Chiropractic, is such a change in the tissue condition of the larynx as to result in complete or partial loss of the voice, or if not so grave, still a marked change in the voice, frequently resulting in it becoming squeally or shrill.

If so-called measles has the application of the principles of Chiropractic from the onset, the process will only be shown in type, and will usually wholly disappear in within twelve to thirty-six hours.

Diet in measles is an important thing, in that there

should be no food administered until the process has entirely abated. The patient should be given all he will drink of good, pure water, should be kept in bed, warm and comfortable, in a well-ventilated room, the windows of which should be shaded to keep out the light, for the eyes will be very sensitive.

So soon as desquamation is fairly on its way light broths may be administered, but the patient for several days, or even weeks, should not be allowed to return to full diet; during which time the kidneys and liver should be corrected to good condition.

Relating to remove measles so-called, is primarily addressed to the twelfth, eleventh, tenth thoracic nerve trunks and the sixth, seventh and fourth thoracic trunks. Of course, there will be motor reactive conditions, which will need to be looked after, that will require release of heart and brain nerves and those of the suboccipital area.

SCARLET FEVER

This phase of process begins with a sudden and somewhat violent chill, followed by an equally, rapidly rising and elevated temperature, concomitant with which a peculiar and characteristic scarlet red rash occurs. Incident to the chill there sometimes occurs nausea and vomiting, and there is generally a sense of soreness in the throat, pain in the head and eyes, ringing in the ears, and all of the symptoms that have been described in so-called measles.

The student must remember that the symptoms of this phase of abnormality vary greatly. Sometimes they are so mild as to escape notice of the individual, and

again are so pronounced as to soon result fatally. Cases have been observed in which toxin was so virulent that chill was the only symptom; the patient dying before the reaction of fever set in. Usually on the second or third day after the chill, the rash appears upon the body over that portion of it ramified by the nerves of the twelfth, eleventh and tenth thoracic trunks. In graver cases the rash extends over the whole trunk and extremities.

The rash in scarlet fever is very different from that in measles, and occurs in small, bright red specks or dots, usually in irregularly shaped patches. The skin, however, remains perfectly smooth. It is swollen, but does not present any protrusions.

Incident to the swollen skin in scarlet fever, there is the most aggravating itchy sensation, and it is usually with great difficulty in graver cases that the patient can be prevented from tearing the skin.

When the rash begins to appear, the temperature, which is already somewhat elevated, begins to rapidly rise, and continues to so rise until the eruption has reached its height.

The reason for the rapid rise of temperature just described is that the accumulation of toxins in the skin becomes such a profound irritation that there is a marked motor reactive constriction, so much so as to practically prevent toxic elimination through the skin.

Incident to the completion of eruption, all the other symptoms of the adverse phase are most pronounced, especially those of the throat, eyes, and pains generally throughout the muscular body. The throat symptoms sometimes become so pronounced as to be mistaken for

diphtheria. Incident to this phase of so-called scarlet fever there is frequently delirium with complete prostration.

From the fourth to the sixth day after the eruption, the skin cracks and loosens, permitting the elimination of toxins, and the temperature begins to rapidly subside and the patient's constitutional condition to rapidly improve.

Soon following the breaking of the skin, desquamation begins, and in this phase of abnormality the desquamation is very much more pronounced than in any of the phases so far described. Large areas of skin loosen and come off as an entirety. Frequently the skin of a whole finger is cast complete, just as a snake casts its skin. Ordinarily desquamation will be complete in from six to ten days after it has commenced.

The crisis of so-called scarlet fever is at the time when the eruption and temperature is at its height, for frequently there is such a precipitation of toxins at that time as to result in complete prostration and death.

The discussion of scarlet fever so far has been upon the basis of the application of therapy, or no attention at all. If, at the beginning of the premonitory symptoms, or at the onset, the case has the application of the principles of Chiropractic it will never present more than merely the simplest and mildest types as they are described herein; usually the symptoms will be entirely abated within two or three days.

Relating in so-called scarlet fever will be precisely the same as that just described in measles, except that in addition thereto greater attention will necessarily need to be given to the kidneys, and to the pharynx, for

sometimes in scarlet fever there is analogous diphtheritic membrane, and in the graver cases this should be carefully watched, and this is especially true in children, and if it has accumulated before the Chiropractor is called, he should see to it that the isthmus of the fauces is freed incident to his other attention.

SMALL-POX

So-called small-pox received its name originally to distinguish it from great-pox, from which it was a development during the period when great-pox or syphilis, was epidemic in many of the countries of Europe and Asia. In that time, and periods succeeding them, but before our modern sewerage systems and sanitation and before the discovery of our sanitary conditions as to housing, clothing, bathing, food, etc., so-called pox was a scourge, and was called "the plague."

In the ancient days when the only sewerage systems that cities had were open ditches into which all of the refuse and offal were thrown, there to rot and stink to high heaven, all of the eruptive fevers, but peculiarly small-pox, was much dreaded, and a scourge of great destruction.

For centuries, under those conditions, so-called small-pox occurred in epidemics, from which people died in untold thousands. However, under our present very splendid sewerage systems, and somewhat mild approaches to sanitation, so-called small-pox, except in very adversely located areas, and unsanitary districts, has entirely ceased to be a grave phase of abnormality.

If it were not for the silly notions inculcated into the minds of people, for financial advantage, that it is

possible by vaccination to produce immunity by producing small-pox in varioloid form, by the inoculation of vaccine into well human beings, this phase of abnormality could be eliminated from the human family entirely.

However, so long as human beings submit to inoculation of small-pox through vaccine virus, so-called small-pox will always be with us, and as long as human beings generally submit to such poisoning the human family will remain subject to pronounced epidemics of this adverse condition.

People sometimes express themselves as being astonished that syphilis results from vaccination. This should not by any means be astonishing, for it must be remembered that such a result is only a reversion to type, for small-pox originally came from syphilis, and therefore, it will frequently result in a syphilitic taint.

Small-pox in some localities is practically continuous, yet it generally occurs in epidemic. Small-pox occurs as a result of filthy conditions. This may not appear in the grossest sense, but small-pox never occurs in any person who is not filthy within, which, of course, produces a peculiarly recipient, tissue condition.

So-called small-pox is not contagious, although it has for centuries been taught that it is so. A person whose body has been habitually clean inside and out, and who is strong and well, and has never been contaminated by vaccine pus is perfectly safe, and can mingle at will with those who are undergoing the adverse process without any danger to himself whatever.

The particular irritant or toxin that produces so-called small-pox has never been isolated, and is unknown.

It is, however, unquestionably environmental and atmospheric.

No persons are subject to small-pox except those who have chronic kidney and liver abnormality.

The acute phase of the chronic, adverse tissue process called small-pox is by an abrupt chill, followed by a fever of the same character and gravity. The symptoms of this fever are completely identical with that of so-called ague, or congestive chill.

The premonitory symptoms are usually those of indisposition for several days, and the same negative lethargic sensations of those preceding a bilious attack. There will be a peculiar sense of pain in what is referred to as the small of the back, pains in the muscles, and shivering sensations occasionally, with a sense of fulness in the head, inflammation of the conjunctiva of the eyes, and congestion of the capsules of Tenon.

At the time the chill occurs there is marked pain in the muscles of the back dorsal to the kidneys, usually accompanied by pronounced pain in the back of the head, radiated over the temples to the eyes. Not infrequently at this time there is nausea and vomiting. In children at this phase there frequently occur convulsions.

At the marked onset of the chill, and in the beginning phases of the rapidly increasing fever, there is frequently suppression of the urine, and partial paralysis of the lower extremities. The gravity of the subsequent symptoms are generally in ratio with the violence of the onset. Cases have been recorded where incident to the chill, the patient became completely prostrated and died without developing further symptoms.

Usually on the second day after the beginning of the chill, the eruption begins to occur. This appears first at the wrists and ankles and on the face, and then covers the breast, arms and thighs, until in the graver cases the whole body is covered.

The first definite proof that the abnormality is of the type called small-pox is when the small, red papules occur at the wrists and ankles, which upon palpation feel like small shot under the skin. When these are found there is no longer any question of the type of difficulty. Of course, these shot-like papules can only be felt upon the wrists, ankles and forehead.

The papules of small-pox when they first appear, are red, and raised above the surface. In a short time the center of the papules turn white, indicating an area of superficially stased lymph. These continue to increase in size as the eruption continues to appear. When the papules are about five days old their centers are sufficiently broken down to permit a sagging, which is called umbilication. Sometimes several papules coalesce forming large ones, which are then called pustules.

At the time the eruption reaches its maximum, or in other words, when the pustules are quite well umbilicated, so that the toxins are escaping through the skin, the temperature begins to rapidly subside, and if umbilication has been sufficiently complete that the toxins from the subcutaneous areas can entirely escape, the fever entirely subsides.

At the juncture just stated, the lymph or colloid in the umbilicated papules rapidly evaporates, leaving only the solid residues from the disintegrated tissue, so that in five or six days there is only the remnant which

is called pus. This dries, forming what is called a scab, and it is at the time these scabs form that the process called desquamation really begins. Sometimes when the liquid from the colloid escapes, scabs form too rapidly and too continuously, and again close the skin, preventing the elimination of toxins, and when this occurs there is a secondary elevation of temperature, which usually ranges higher than the first fever, because the scabs thus formed are more difficult to break than was the skin originally.

Ordinarily, however, the scabs do not close the skin, and in a day or two after their formation they begin to loosen, and the process of desquamation is fairly on its way.

At the time of the loosening of the scabs just described, there is an emission of a very unpleasant and sickening odor, which once smelled will never be forgotten. It is the odor from the pus of the disintegrating tissues.

Incident to the first eruption of the pustules, there is a peculiar odor which emanates from the body, which is a characteristic symptom, and concomitantly with the shot-like papules aids the diagnostician in arriving at the knowledge that the process is typically that phase called small-pox.

One of the greatest dangers of small-pox is that a papule may occur in the conjunctiva of the eye, or in the cornea, or so near it as to encroach upon it, the effect of which is total or partial loss of sight.

There is another condition that is equally dangerous, for, on account of the regulations in substantially all of the cities as to quarantine, so-called small-pox is usually attended, or neglected, at what are called retention or

pest houses, under the direction of a public health officer, who is invariably a doctor of medicine. All characters of adverse conditions which are sequences of small-pox occur because of the neglect at such places.

The patient showing the symptoms of this type of adverse phase should be put to bed in a well-ventilated comfortable room, shaded so as to keep the light out, for the eyes are sensitive. The temperature of the room should be raised to about seventy-five degrees, and kept at that. The clothing should be entirely removed from the patient's body, and he should be covered by but one thin sheet. From the very onset he should have the application of the principles of Chiropractic about four times the first day, and three or four times the next day, followed by about two each day until all of the symptoms have subsided, which result will usually be attained in from two to five days.

Diet in small-pox is of the greatest importance, for no food of any kind should be administered until all the symptoms have wholly disappeared, and until the functional offices of the patient are all active, and particularly until the liver and kidneys are active.

The author has applied the principles of Chiropractic in the removal of so-called small-pox with great regularity for many years, and has had many reports from his graduates in the field in the South, where this phase of abnormality almost continuously prevails, and finds himself in position to announce that, under the application of the principles of Chiropractic, this phase of abnormality is a very simple matter, and its active symptoms may be abated usually in a few hours.

Relating to remove so-called small-pox is, of course,

primarily addressed to the twelfth, eleventh and tenth thoracic trunks, and the seventh, sixth and fourth or liver and stomach areas. Incidentally, careful attention should be given to the nerves to the heart, respiratory organs, and brain; which will usually be sufficient to take care of the eyes and throat.

CHICKEN-POX

This phase of abnormality is hardly worthy of separate discussion. The symptoms are precisely the same as small-pox, except that they are not usually so grave.

The papules in so-called chicken-pox, instead of being red and hard, are soft and pale, and almost from the first in the form of blisters, and they do not undergo the characteristic umbilication.

As soon as the eruption occurs, which is usually within twenty-four hours, but may be a couple of days, the temperature begins to rapidly fall, and so soon as the eruption is complete the temperature presents normal registration.

Usually on the third to the sixth day the pustules begin to dry up, leaving red spots as large as a small pea, and desquamation goes on rapidly, usually being complete within a week.

Chicken-pox so-called begins with a chill, followed by a fever. If at the beginning of the chill, the principles of Chiropractic are applied, and two or three relatings administered during the first hour or two, usually the whole difficulty subsides, and there is nothing more of it.

Diet is of the same importance in connection with this phase of abnormality as those in this chapter discussed,

and no food should be administered until all of the symptoms have disappeared.

Relating in so-called chicken-pox is precisely the same as that in small-pox, and needs no further remarks in this connection.

CHAPTER XXXVII

QUASI-ERUPTIVE FEVER

The phases of abnormality to be discussed in this chapter are those febrile conditions in which there occasionally occur an eruption upon the skin.

Without going into any particular detail, there are many of these phases. The eruption that is sometimes called "heat," nettle rash, woodland poisoning, and a great many others are of this type. So-called spotted fever, which will be later discussed in this work under the title Cerebro-spinal Meningitis, is of the quasi-eruptive type, for occasionally, as incident to that typical process, there is an eruption upon the skin—hence the name. This eruption, however, seldom occurs.

It has already been called to the student's attention that frequently in diphtheria, so-called, there is an eruption upon the skin, and while this does not frequently nor generally occur, still that phase of process should be mentioned under this classification.

The eruptive phases of syphilis have been discussed in connection with the general discussion of that subject, and the only reason for the reference here is to call the student's attention to the fact that that phase also comes under the present classification.

However, the pronounced and typical phase that comes fully under this discussion is very general in its nature, and is sufficiently evident to comprehend all of

the types, and its general details will be sufficiently given in this connection.

TYPHOID FEVER

So-called typhoid fever is classified as an acute disease by therapy, but it must be constantly kept in mind that it is but the acute phase of a chronic tissue abnormality.

The chronic tissue condition is brought about by the kidneys failing to remove the toxins from the blood, while the abnormality of the digestive glands results in the production of an excess of uric acid, and other adverse, chemical compounds. Of course, these glands would not act thus abnormally if it were not for the fact that they are acting under chronic occlusion. It must be remembered that chronic occlusion to the digestive glands is also chronic occlusion to the intestine.

The situation as outlined in the preceding paragraph results in the constant accumulation through the intestine, particularly the jejunum and ileum, of a toxin which precipitates into the recesses of the walls within the folds of the *valvulae conniventies*.

The situation just referred to is aggravated by the fact that as these toxins accumulate, which are usually portions of fermented and putrified remnants of food, the liquid excretion from them proceeds down the bowel, and peculiarly accumulates around the glandular areas called Peyer's patches. The Peyer's patches, together with the rest of the wall of the bowel, being very inactive, there is said to be a progressive disintegration of these tissues, which not only serves to weaken the wall of the bowel, but in the first instance is a profound irri-

tant, and later results in a disintegration of nerve terminals.

Incident to the toxic condition of the intestine described, there will nevertheless be a certain amount of absorption and the substance absorbed will, of course, be morbid, and distinctly poisonous, and as soon as it comes in contact with the periphery of active nerves, it sets up profound motor reaction, which particularly centers to the brain, from which it reacts to the whole organism generally, but particularly to the kidneys, spleen, liver and pancreas, the phreno-costal lung, and the skin over these areas, and indeed generally. While, of course, all returning nerves to the brain will be suffering marked occlusion, and the symptoms of the adverse process will be particularly pronounced in brain tissue.

A careful examination of the record of any person who ever presented the symptoms of typhoid fever, will disclose the fact that for a long time before the actual symptoms occurred, there were many premonitory symptoms pointing to that result, so that, while therapeutically the phase is called acute, not only the tissue condition, but the symptoms, are chronic.

The adverse symptoms of the acute phase usually manifest themselves several days and sometimes weeks before the individual is finally prostrated.

The victim of this adverse phase expresses chilly sensations in the mornings shortly after rising; is low spirited; finds it difficult to enter upon active labor, either mentally or physically. He experiences wandering pains through his body, especially in what is ordinarily called the small of the back, radiating through the lower abdomen and down the legs, and outward from the

region of the fourth thoracic area to the shoulders; experiencing a profound congestion in the head, especially by the middle of the afternoon.

There is frequently headache or dull pain in the head, and pain in the eyes, with occasional disturbances in the vision, such as specks or spots before the eyes, and an indifferent and fluctuating appetite.

The symptoms just detailed are usually accompanied by inactivity of the bowel, alternating with diarrhea. Sometimes the constipation is marked, and at other times the diarrhea is marked, and after the first few discharges the stools take on what is ordinarily called a "pea soup" appearance, and afterward become a watery, blubbery passage, and occasionally may contain a small amount of blood. For some time before taking to bed, the symptoms of the victim are frequently like those of bilious fever, and really are very much like that for a period after prostration.

Finally there is a distinct chill every morning, with a slow elevation of temperature until about four or five in the afternoon, when it declines, only to be followed by a chill the next morning, of a little more pronounced type with the temperature rising a little higher in the day, and declining a little less, until finally the sense of chill is very pronounced in the morning, notwithstanding the fact that there is considerable fever, and the fever ranges very high by the afternoon.

By the time the symptoms last indicated in the preceding paragraph occur, the temperature does not change much in the twenty-four hours, often no more than one or two degrees, and at this time the brain symptoms usually become quite pronounced.

Usually before the symptoms have advanced as far as already described, but not always, the patient feels compelled to remain in bed. Sometimes, however, until the symptoms have become as pronounced as those described, the patient insists upon remaining up.

Usually about the time the symptoms have become as pronounced as those described, the patient is compelled to remain in bed all the time, and during the afternoon and evening, usually suffers some delirium, and thereafter lies in a prostrated condition very quietly as a rule during the early morning hours, but usually expressing a pronounced delirium by four o'clock in the afternoon, but sometimes demonstrating a great deal of restlessness.

By the time the gravity of symptoms already described has been reached, there will be a dull red flush in the face, accompanied by an indisposition of the patient to notice anything; a certain inertness, sometimes approaching coma, and nerve occlusion to the brain is always profound.

As just indicated, where brain tissue has been abnormal for a long time, there is almost from the beginning markedly adverse mental symptoms, indicated by delirium, amounting to nightmare, in which the mind conjures all kinds of strange and fantastic things. Many times the patient imagines himself in strange countries, or surrounded by strange beasts and men, and is peculiarly inclined to the notion of strange and fantastic animal or insect life threatening or disturbing him.

In a few cases there is no delirium to speak of, but in such cases there are profound symptoms of mental prostration. In so-called typhoid there is one symptom

that is always marked, and substantially unvarying, and that is a severe pain in the tissues of the back behind the kidneys—a pain that, no matter in what position the patient lies, does not disappear, or produce much relief, and while the victim is conscious of the pain, he usually does not complain about it, but upon being asked about it, will admit he is suffering, and this no matter whether he is conscious or delirious.

Where the pronounced pain in the back appears very early in the symptoms, it is followed almost at once by intense delirium, or great mental prostration. These symptoms prove that there has been pronounced and prolonged occlusion of the nerves ramifying the kidneys and digestive glands and that the tissues of these glands are very abnormal.

Relative to the last paragraph, the student should also remember that the area of the intestine in which Peyer's patches are very large is ramified by the twelfth and eleventh thoracic nerves, and also quite richly by those from the sixth, seventh and eighth thoracic trunks, so the glandular areas will be quite abnormal, to say nothing of the general tissues of the intestine as incident thereto. Therefore, in such cases the bowel complication, as the therapeutists call it, is and will be a marked emergency. Where the tissue degeneracy in the region of Peyer's patches is marked from the very onset, there is danger of disintegration, resulting in hemorrhage, and cases have been recorded in which there was perforation of the bowel.

It is in cases where the bowel complication is marked, and where there is danger of hemorrhage, that an eruption sometimes occurs over the abdominal area,

ramified by nerves extending through the twelfth, eleventh and tenth thoracic trunks. This eruption seldom occurs, but nevertheless has been observed.

So-called typhoid fever is classified by therapists as being a self-limited disease. That is, they claim that it is a disease that, without any treatment, runs its course in twenty-one days.

This attitude, taken in connection with the fact that the therapists also claim that typhoid fever is caused by the *bacillus typhosus*, causes the matter to present some very strange inconsistencies, which are not ameliorated at all by the fact that they also claim that the active principle is introduced into the body through contaminated food and drinking water. The inconsistency of this claim is heightened by the fact that they claim typhoid fever to be contagious, and that the contagious principle is contained in the typhoid stool, notwithstanding the fact that so-called typhoid fever to a very large extent occurs sporadically, and thousands of cases have been known to occur in the most isolated conditions, and in places and at times of the year when the possibility of production or transmission of poison from stools is absolutely impossible.

It seems quite unnecessary to say that the therapeutic theory has no foundation in fact, and that this phase of abnormality, in the face of all the evidence is no nearer self-limited than any other, it being the truth that any abnormal phase will cease to present the same symptoms in time, if the resistance of the individual is not overcome by the adverse, chemical combinations incident to that phase of abnormality.

In the same sense in which typhoid is self-limited,

colds, laryngitis, pneumonia, gonorrhea, and even syphilis are self-limited. That is to say, if the individual has the resistance to endure these phases of pathology sufficiently long, all of the symptoms will completely change.

In connection with the statement in the last paragraph, the student should remember that an adverse tissue and functional process depends upon the consistence of the tissues, and that in turn depends upon the situations which control construction and disintegration of tissue, and the removal of disintegrated substances from the area of tissue construction.

In this view of the situation, it will be seen that the symptoms of typhoid fever are those arising from the irritant, and motor reaction incident to a particular character of retained morbidity, and when that retained morbidity has been eliminated or neutralized, or its tendency changed, the adverse process called typhoid fever is at an end.

Therapeutic books not only say that typhoid fever is a self-limited disease, but they suggest no remedies for it; their contention being that the body must be supported until it overcomes the disease. The symptoms and conditions so far discussed are those that pertain to the situation where no valuable assistance is employed, in other words, are the steps and phases that usually occur as incident to this phase of abnormality cared for therapeutically.

In the adverse phase called typhoid fever, the very first thing to be done is to remove occlusion to the brain, heart and respiratory organs, not because these are primarily involved, but because their vital activity is primarily necessary.

The next step on the part of the Chiropractor is to remove occlusion to the kidneys and intestines, particularly to that part of the intestine in which Peyer's patches are most numerous.

It will be the next duty of the Chiropractor to see to it that the large bowel is empty, and that it is in a sanitary condition, and for this it is advisable to resort to an enema of plain water, which should be at first of the temperature of the blood. Afterward, if the bowel has not yet been brought to a sanitary condition, the water may be as hot as the patient can well receive it, until the bowel is rendered sanitary, after which in some very aggravated temperatures, cool water may be injected. However, this is seldom necessary or advisable.

So soon as the bowel is rendered free, careful attention should be addressed to the large digestive glands, but in releasing the nerves to these glands the Chiropractor should be especially careful not to set up an exaggerated, glandular reaction, and to secure a depuration of the accumulated toxins of these glands, only in such amounts as the intestines can easily transmit without unusual irritation to the nerve system.

When the patient finds it necessary to take to his bed, the bed should be in a room from which the light should be shaded, for the eyes will be sensitive to light. The room should be thoroughly ventilated, although no draft of air should be permitted to strike upon the body of the patient. The temperature of the room should be maintained at about 70 degrees Fahrenheit. Every inducement to depuration through the skin should be made, and therefore, the patient should wear no clothing

in bed at all, not even a gown, and should only be covered by a sheet or light blanket.

The patient's skin should be frictioned twice or three times in each twenty-four hours, and for this purpose may be moistened with tepid water, but only a small portion moistened at once, after which it should be frictioned dry with a rough towel. On parts of the body in which the patient senses chilliness, the friction bath may be followed with an alcohol rub—the irritation of the alcohol many times tending to produce a hyperemic condition that will encourage depuration.

The head of the patient's bed should not be less than six inches higher than the foot, and the patient should be encouraged to lie upon the side, or obliquely upon the front of the body as much as possible, and he may lie upon either side. The thing to avoid particularly is the patient lying upon his back, for it is very deleterious for a patient undergoing this character of abnormality to lie upon the back. Notwithstanding this fact, every typhoid patient will try to lie upon his back, and it will be a constant care to the attendants to see that he does not do so.

The particular reason why a person suffering from so-called typhoid fever should not be allowed to lie upon his back is because there is already pronounced occlusion of the twelfth, eleventh and tenth thoracic nerve trunks, as well as usually the headward lumbar trunks. The solar plexus, the aortic and hypogastric plexuses therefore, will be already abnormal from this occlusion, which will be incidentally accentuated through the nerves from the digestive, glandular areas, and the weight of the viscera pressing dorsally upon these

plexuses and ganglia will tend to still further aggravate the already adverse situation.

Diet is an important consideration in so-called typhoid fever, for the reason that so long as there is any fever no food of any kind should be administered to the patient at all. If the patient frets for food, it is sometimes advisable to administer light, strained broths, merely to overcome the adverse attitude, and not because there is any hope that food under such circumstances can be of any benefit to the patient.

Generally nothing but cool (not ice) water, should be administered to the patient in as copious quantities as he desires, and if the patient does not express a desire for water, he should nevertheless be induced to drink not less than a gallon of water each twenty-four hours. Usually the patient has a desire for water. The reason for giving the water is that the body stands greatly in need of this liquid by which it can be internally cleansed.

If broths are administered they should be made from vegetables, not from meats, from which all of the solid parts have been strained, and no solids must be put into them, and they should be administered as warm as is tasteful to the patient, and may contain a little salt and considerable paprika sufficient to give them a pungent odor.

One thing that must be particularly and always prohibited is the administration of milk in any form, and that means milk, sweet or sour, butter milk, cream, ice cream, or anything of that character. It also means the elimination of milk, coffee, cocoa, or things of that kind.

There should never be administered to a so-called

typhoid patient any fruit juices of any character whatever during the time of the fever.

If, at the time of the premonitory symptoms of typhoid, or even at the time the patient begins to suffer from the morning chills, he has the proper application of the principles of Chiropractic, the case will progress no further, and all of the typical symptoms will soon disappear. If, however, the Chiropractor is not called until the patient is completely prostrated in bed, it will usually require from two or three days to a week to abort the symptoms, but even then none of the aggravated symptoms that have been herein described will occur.

Of course, if the Chiropractor is called in to the case following the treatment of a therapist, there is really nothing that can be definitely said in advance about it, except that he must ascertain what, if any, medicines have been given; how long the patient has been prostrated, and what have been his general characteristic symptoms, and be governed accordingly.

If the Chiropractor comes to a case of typhoid fever at the time the patient is first prostrated, he should relate the patient four to six times the first twenty-four hours, and if the symptoms indicate it, as many the next twenty-four. He should in any event administer frequent corrections until the fever ceases, after which the frequency of administration must be left to his sound judgment.

If the Chiropractor follows the therapist in the case, he must in his first investigations be very careful to ascertain the condition of the bowels, and if he finds the patient has been constipated, and that the bowel

has been wholly inactive, which is frequently the case, after releasing heart, brain and respiratory nerves his next effort should be directed to securing a sanitary condition of the bowel, and from this on, he must work slowly, and with extreme caution, for on account of there having been no bowel outlet, toxins will have remained in the small intestine, and there is always considerable danger of perforation. After a day or two of slow work, he will be able to tell what the bowel situation is, and if there is no apparent danger of perforation, he will advance rapidly in his work.

Typhus fever is a peculiarly aggravated phase of so-called typhoid, and needs no further discussion than what has been said herein; the symptoms being substantially identical, and the result under the application of the principles of Chiropractic practically the same.

Typho-malarial fever is a phase of adverse process which has been discussed in connection with malaria. The therapist conceives here that the symptoms of malaria have finally merged into typhoid. This phase needs no further discussion, for it responds under the application of the principles of Chiropractic identically with typhoid fever.

Typho-pneumonia is a phase of typhoid in which the phreno-costal lung condition is most aggravated, and in which the patient has a cold, which finally results in the phase symptomaticly like that of pneumonia. In this phase of abnormality the application of the principles of Chiropractic will require in addition to that of typhoid the address ordinarily given to pneumonia, and the same care and attention in that respect as in a separate case of pneumonia.

It is hardly necessary to say that when a Chiropractor is called to a case of typhoid fever, that such a case will require that he shall give it specific and careful attention, and for the first two or three days he should see the patient at least three or four times, and must exercise the greatest care and caution in all phases of his attention.

Relating to remove occlusion causing the process called typhoid fever, must of course be primarily addressed to release of the nerves to the kidneys, large digestive glands; that is to say, the twelfth, eleventh, fourth, sixth, and seventh thoracic nerve trunks, and incidentally giving attention to the release of nerves to the whole of the small intestine which may be any of the trunks from the fourth to and including the second lumbar area.

Incidentally, as has been already explained, careful and persistent attention should be given to releasing occlusion of the eighth cervical, and second thoracic nerve trunks, the fifth cervical and the suboccipital area, the latter to release not only the cervical nerves, but visceral nerves from the pneumogastrics, and vertebral accessory trunks; for through these the heart and respiratory systems are supplied.

CHAPTER XXXVIII

LOCAL SWELLINGS

Congestion—Eruptions—Pimples—Boils—Carbuncles—Felons

One of the most remarkable symptoms attendant upon tissue conditions and functional processes is the phenomenon of swelling, and, while many things are known about swelling, there is much more yet to learn.

The latest therapeutic authority makes these assertions as to swelling: "(1) A degenerative phase in various tissues, characterized by swelling; a cloudy appearance, and albuminous infiltration, and often ending in fatty degeneration. (2) A change which takes place in the protoplasm during the process of nutrition."

It will be seen that while these definitions are high-sounding and apparently scholastic, yet they really fail to tell us anything, except that in swelling there is a change in the tissues, which even the simplest novice knows.

It is well known that the integrity of tissue is maintained by a continual addition of new matter in the process that we call assimilation, and as regular and as continuous disintegration of cohered matter, and depuration of the debris.

When the processes just referred to are carried on in equilibrium, the physiologic order is maintained, and normal tissue is produced.

The words "normal tissue" in the last paragraph

refers to tissue of right size, color, consistence, and relation. In other words, the cells in such tissue are of the right size, right chemical consistence, and correct relationship. Such tissues are normal.

There are two departures of a cardinal type from this situation. One is the production of a tissue less in size than the normal, which may receive one of two designations—atrophy or anemia. The other condition is a tissue that is too large, and receives the name congested or swelled.

It has not been conceived that a congested tissue, although remarkably enlarged is swelled, because the thought of congestion has been confined to the liquids of the body, particularly the lymph, which under occluded stimulus accumulates in excessive quantity in a tissue, distending the potential spaces of the tissue. But it has not been thought that such condition changes the actual consistence of the tissue, although it must be remembered that is the very result which occurs.

The student must keep in mind that there is indeed little difference many times between congestion and swelling. Indeed, the line of demarcation is not well fixed, and just where congestion merges into swelling is impossible to determine in a great many cases.

Congestion, it will be seen in one aspect of it is an infiltration of liquids into the tissues, which liquids are retained there because the depuratory offices are aborted through occlusion to the area. In other words, then, congestion is a damming-up process.

It is very difficult to distinguish swelling from congestion as described in the last paragraph, yet there are

some phases of swelling that do not fall wholly within that purview, and these should be expressed.

Paramountly swelling occurs when there is occluded stimulus to the area, which causes the disintegrated colloids of that area, particularly the albuminous and glycogenic substances to be retained as morbidity within the potential spaces of the area. This situation constitutes true swelling.

There is another phase of swelling equally important, and accomplished in much the same way. Where the integrity of tissue has been destroyed by a bruise or contusion, or by the injection of a toxin of such virility as in either case to injure the nerves of the area, so as to dethrone assimilation and abort depuration, except to a very limited extent. In such situations true swelling takes place.

Swelling, therefore, is actually an intermediate condition between congestion upon the one hand, and giant cell production upon the other, and is actually neither of these.

The paramount fact that the student must remember in connection with swelling is that the phenomenon is incident to, and is a preparation for, an unusual means of depuration, because the ordinary channels are stopped by occlusion. Therefore the only means left open is an eruption to a surface, which will give release.

Accumulated substances, incident to swelling, is morbidity, in the sense that it is not animate, and under the heat and moisture surrounding it, can retain its integrity for a short time, when it undergoes those putrifying processes transmuting it into pus, which is a virulent poison.

The student will observe that while the process of swelling is not understood, yet the various steps are understood, as well as the object to be attained, which is to accomplish depuration or elimination of chemistry, which cannot be used in animate economy, and which is in the way of possible restoration of the tissues involved, and will recognize the fact that swelling, like congestion, atrophy and enemia, are, when properly considered, friendly processes.

ERUPTIONS

The process of eruption has been quite fully discussed in connection with eruptive fevers, and not much more need be said here.

The means of depuration by eruption are multifold, and the characters of eruption are almost numberless, and incapable of being described. However, they may be to some extent classified.

There are the smooth eruptions, by which morbidity is projected to the surface, and eliminated by breaking the covering of that surface. This classification reaches its highest illustration in so-called scarlet fever.

There is another phase of eruption that is rough and granular, but not pustular, which reaches the surface, and escapes by breaking the integrity of the surface. However, before doing so, causing the surface to become rough, raised and irregular. This phase of eruption is observed in all kinds of so-called measles, eruption that occurs incident to syphilis, and a great many rashes that occur upon the body.

The third phase of eruption is that which may be justly classified as being pustular, where there are

accumulations of morbidity in subcutaneous areas, which break the surface in pustular formation, and thus permit their toxins to escape. This character of eruption reaches its highest illustration in chicken-pox, small-pox, and a considerable number of other constitutional conditions.

PIMPLES

A pimple is really one form of eruption, but there are certain typical phases of process which must be introduced in connection therewith.

A pimple is a morbid accumulation, occurring in the subcutaneous tissues and the skin, and is a means of elimination to that area. A pimple, then, never occurs except in an area of stasis, where the colloids accumulated or retained are there because of occlusion of nerve stimulus to the area. There have been many theories exploited with regard to the cause of pimples, none of which have been satisfactory, because they have not fully stated the truth.

One phase of pimples has received the name of *acne vulgaris*, from the conception that they are caused by vulgar eating, or are the results of gormandizing. This however, is never specifically true. If it were true, in this age the whole human family would be covered with pimples.

It has been charged that pimples are the result of uncleanliness of the feet, lack of proper bathing, and many untenable propositions.

Generally speaking, pimples are caused by occlusion of nerve stimulus to an area, which causes the retention of morbidity in the area, which results from increased

disintegration of cell elements, and of decreased assimilation; resulting in small areas of colloid which undergoes putrefaction and erupts to the surface.

Pimples on the face of young males, are frequently caused at the time when the growth of the beard begins, because there is an unusual concentration of matter to that area for the production of the beard, which cannot be normally brought and distributed on account of occluded nerve stimulus, with the result that pimples occur, and the process of beard-growing is delayed, but is finally accomplished after which such pimples disappear.

The application of the principles of Chiropractic to an area of the body under pimple formation will entirely remove them in any case. That is to say, vertebral occlusion of nerves to the area must be removed, and any occlusion between the vertebral foramina and the periphery of the nerves must also be removed. This requires definite application usually in the immediate vicinity of the pimple area. A pimple, it will be seen, always occurs in a circumscribed area, and it follows out step by step the processes that result in graver abnormality of the same type.

BOILS

A boil is a circumscribed accumulation of morbidity larger than a pimple, occurring in the soft tissues of the body under the skin, or under the superficial membranes of the body near some surface. A boil occupies a more extensive area than a pimple, but it is really the same process of depuration. If a boil should occur within a cavity, that is to say, in a submucous or

subserous area, it would usually be referred to as a tumor or abscess. However, many boils occur in these areas, and the practitioner must expect to find the same character of depuration going on in the subserous and submucous areas as upon the outside surface.

A boil usually begins by a precipitation of dense colloid in an area of stasis; occlusion to the area, by motor reaction, becoming more intense until the complete capillary system in the area ceases to operate, when the phases of putrefaction proceed rapidly. The animate tissue surrounding the area is walled off by the formation of a peculiar membrane, and the morbidity and other substances within the membrane rapidly transmute into pus. This process is called " heading up" by the therapeutic profession. Eruption now occurs to the surface. When the core is expelled, the walling membrane disintegrates, and the cavity partly fills with animate tissue and partly with scar tissue.

CARBUNCLES

A carbuncle is a morbid accumulation in or under an aponeurosis, deep fascia, or ligamentous tissue of a rigid character, and is in all respects precisely like a boil, except for its location.

Carbuncles always occur near joints, and they are usually located on the dorsal aspect of the region upon which they occur.

Morbid accumulations of the type called carbuncle occur with great frequency on the dorsum, or back of the neck, on the dorsal aspect of the pelvis, the dorsal aspect of the knees, and with some degree of frequency at the wrist.

The process of depuration by means of carbuncle is indeed a very painful one, because of the rigidity of the tissues which lie between the morbid center and the surface, and because it requires a long time, and much incidental congestion to erupt to the surface. And, of course, without assistance the process must continue until it has disintegrated a pathway from its place of formation to the surface.

The process by carbuncle is always accompanied by general symptoms; by chilly sensations, sometimes by actual chills, and frequently by slight elevation of temperature, and many times by high elevations of temperature with marked gastric symptoms.

FELONS

A felon is a morbid accumulation not in any sense different from a carbuncle except that the seat of accumulation occurs beneath and in the periosteum of bones, which, of course, makes eruption to the surface a very difficult, prolonged and painful process; for disintegration must occur through the periosteum, and then through the deep fascia, aponeurotic and ligamentous tissue which intervenes between that area and the surface.

It also will be plainly seen that the congestion and morbid accmulation necessary for eruption or disintegration to a surface results in terrific pressure in the area. This frequently serves to force the morbid matter into the adjacent, cancellous bone tissue, with the result that before eruption to a surface has been accomplished the bone has undergone pronounced, and sometimes complete disintegration.

No process that occurs as incident to function is any more painful and continuously distressing than that of a felon left to itself to " head up."

The discussions of the several processes so far have been given from the standpoint of their receiving no assistance, except as to pimples. These processes must now be discussed under the application of the principles of Chiropractic.

If upon the first evidence of morbid accumulation incident to boil, carbuncle or felon, the principles of Chiropractic are applied to the situation, occlusion of nerve stimulus to the area will be removed, thus restoring the depuratory process by which the morbid accumulation will be carried away and eliminated, which will entirely abort the adverse process.

However, if there has been delay in the application of the principles of Chiropractic so that the morbidity has temporarily centered, release of occlusion of stimulus to the area will not serve to depurate the morbidity, but will, however, serve to increase the congestion to the area, and will hasten the eruption to the surface, but if the assistance of the Chiropractor should stop by simply removing occlusion to the area, these good offices would also greatly increase pain.

In view of what has just been stated in the preceding paragraph, it will be seen that the correct method for the Chiropractor to pursue in case of boil, carbuncle, or felon after sacculation of the morbid center has occurred, is to have the boil, carbuncle, or felon lanced from the surface to its deepest point, for the purpose of taking off the intra-pressure, and to permit the rapid and uninterrupted escape of the morbid accumulations.

In connection with what has just been stated in the preceding paragraph, the practitioner is cautioned that before he has a boil, carbuncle, or felon lanced he must make careful palpation to assure himself that the situation permits the removal of occlusion to the area involved, in order that he may know that he can control the subsequent phases of the adverse process, for if there was ankylosis or any impediment, so that he could not remove occlusion, he could not control the subsequent phases.

Surgeons are taught to believe that boils, carbuncles, and felons must come to a head before they are lanced, and that if they are lanced before that time there is danger of sepsis or blood poisoning, and usually they will advise against the method laid down in this chapter. However, the Chiropractor must assume the responsibility, and must secure the services of a surgeon who will do as he says, and strictly follow out the rules as here laid down.

It is an unjustifiable indignity to require a human being to wait and wait from one to six weeks under a process of poulticing to bring a boil, carbuncle, or felon to a head, when all the pain and difficulty can be removed in a few minutes by the sharp edge of a lancet, since it is really true that under the application of the principles of Chiropractic subsequent to the lancing, there is not the least possibility of blood poisoning.

The author in his own, and in the practice of graduates from his institutions, has observed thousands of cases handled in the manner as outlined, and has never known a case of sepsis or blood poisoning to result. Indeed, such a thing as sepsis, or blood poisoning,

under the application of Chiropractic has never been known to occur.

It is advisable, after the surgeon has lanced the morbid center, to have him dress the wound in such a way that it will remain aseptic. The best method is to have it covered with a large, antiphlogistic poultice, covering a much wider area than the morbid center, which should be thick over the incision, and gradually thin off in all directions. The antiphlogistine should be covered with two or three layers of medicated cotton out to or beyond its margins, which cotton should be covered with oiled silk and then carefully, but not too tightly bandaged.

Before placing the poultice as described, the surgeon should prepare for easy and sure drainage from the bottom of the incision, by placing a little surgical gauze in the wound, and letting it extend beyond the margin of the poultice under the cotton, so that there will be no impediment to depuration of disintegrated substances from the morbid center.

After the morbid center has been lanced, and poulticed as just described, the Chiropractor should apply the principles of Chiropractic, in milder cases three times, and in graver cases as much as six times in twenty-four hours, to remove occlusion from all of the nerves to the area; and see to it that occlusion at other areas is removed. The surgeon should redress the incision, cleansing it thoroughly but using no antiseptics, each twenty-four hours until the so-called core has disintegrated and come out, which it will usually do at the second or third dressing.

When the core comes out the surgeon should dress

the wound, providing for drainage as before, but being careful to draw the wound together, carefully approximating the edges; placing a little ridge of medicated gauze lengthwise of the incision, and strapping the same crosswise with short strips of adhesive bandage to hold the edges in position, and then with wider and longer strips of adhesive, applied to tissues further back. The whole area should then be covered with one or two thicknesses of medicated cotton, depending upon the condition of the weather, covered with oiled silk and lightly bandaged.

If these simple rules are followed by the Chiropractor, all of the horrible agony of boils, carbuncles, and felons may be quickly removed, and the wounds recovered with the minimum of scar, and with no danger whatever of sepsis or blood poisoning.

Relating to remove occlusion in case of boil, carbuncle or felon, of course, is addressed to the vertebral area from which the nerves extend to the area of the boil, carbuncle or felon, but will incidentally require removal of local occlusion all along trunk nerves from the vertebral area to the place of morbid accumulation.

Incidentally, general areas of occlusion must be removed in order that the general functions of the body shall be carried on in a positive and healthful manner.

CHAPTER XXXIX

ABNORMAL CONSTRICTION

Convulsions—Tetanus—Chorea—Meningitis—Cerebro-spinal Meningitis

There are marked and peculiar constrictions, which are concomitant with, and the most prominent symptoms of certain phases of abnormality. These must have attention at this place.

A most remarkable and least understood phenomenon in connection with functional operations is that of hypertonicis under nerve irritation, whether irritation comes from an extraneous source, and in that sense is traumatic, or whether it comes from chemical adversity within the body.

As an incipient proposition the irritation of nerve terminals beyond the normal, results in an abnormal contraction of the tissue elements stimulated by such nerves in an amount equal to the excessive irritation.

The law of ameboid movement applies to all of the animate cells of an area when they are subjected to an irritation from an extraneous source to such an extent as to overcome resistance, or are submerged in a colloid of abnormal chemistry.

While we know the facts as stated, we do not know why these things are true. We know that they are a part of the phenomena of all animals that have well developed powers of locomotion and many others.

In the normal, it is well known that nerve stimulus

radiates from the cortical center equally and regularly to the periphery of all nerves of the system, and it is also known, although not so generally, that any interference with the radiation of nerve stimulus results in nerve rhythm becoming spasmodic.

It is one of the pronounced phases of nerve occlusion that from the point of occlusion to the periphery of the nerve, the rhythm is not only changed, but becomes spasmodic and acts as it were in waves of three, each being more pronounced, followed by quiescence, when the waves of three occur again.

It is also true that from the point of occlusion vibratory reaction to the cortex is changed and irregular, so that a part that is injured by continuing occlusion does not produce the consciousness of pain in the same amount continuously, but produces the consciousness of spasmodic or periodic pain.

Any person who ever enjoyed the process incident to a toothache will need no further illustration of the proposition here being discussed, for it is a well-known fact that a tooth does not ache steadily and constantly, but aches by what seems to be waves or impulses; that is to say, periodic pain.

Inflammatory conditions in the body at almost any place, acquaint the sufferer with this periodic pain, which should make him understand that the chief difficulty experienced is with the rhythm of nerve stimulus transmission, which is interrupted, and being interrupted, the functional results occur in an interrupted or periodic manner.

A few of the more pronounced phases of these periodic constrictions, it is hoped will lead the student to a

fairly reasonable understanding of the situation, even though the actual and fundamental reasons for them cannot be basicly given.

CONVULSIONS

A convulsion is merely a phase of abnormality in which suddenly the parts involved are abnormally drawn together. The word itself is from the Latin " convellare," meaning " to pull together," of course in a violent manner.

It is not necessary, in order that conduct shall be classified as convulsions, that the parts shall remain for any definite length of time pulled together, but they may almost at once relax. Shivering from cold is a convulsion, and yet, if the shivering is not pathologic, it is not so classified.

There are convulsions from traumatic injuries and contraction of tissues under sudden and violent titillation of nerve terminals which conduct therapeutic terminology has designated as reflex action. However, it is really nothing less than convulsion, and yet if such movement is not pathologic it is not classified as convulsion.

Convulsion, as it should be presented here, means all of these phases of pathologic, violent, involuntary constrictions that occur as incident to many and varied phases of abnormality.

In this particular view of the situation there are gastric convulsions, biliary convulsions, convulsions of the trachea, larynx, pharynx, and esophagus. There are also convulsions of the pillars of the fauces, and of the roots of the tongue. There are also mesenteric and pleural convulsions.

The intention in the preceding paragraph is to call the student's attention to the fact that under occluded nerve stimulus substantially any tissue of the body may present the remarkable phenomenon of convulsive conduct.

Ordinarily release of occlusion of nerves to the area involved in convulsions will very soon correct the rhythm, and secure normal conduct; and this will always be true unless there is such a profound accumulation of adverse chemistry as to result in constant transmission of irregular vibration to the cortex of the brain.

In cases of convulsions where the periphery of the nerves are being constantly irritated by a toxic accumulation, the convulsion will not be wholly overcome until the toxin is depurated, disseminated or neutralized by continual release of occlusion, so that the normal rhythm of nerves involved can be restored. So soon as this result is accomplished, convulsions will cease. Dilation of the rectum is a great help in overcoming convulsions.

TETANUS

This phase of abnormality is not well named. The word tetanus is taken from a Greek word meaning "to stretch;" the idea being that in the convulsion the tissues involved are put upon the stretch, and in this sense only is the term applicable.

Lockjaw is the usual and ordinary name for tetanus, because one of the incipient and paramount symptoms is the fixation of the muscles of the mandible, so that the jaw is locked as it were in one position. It is the therapeutic idea that tetanus is caused by the *bacillus tetani*. This theory, however, is wholly unestablished, and the facts do not in any sense sustain the contention.

Incident to the fixation of the muscles of the jaw, as already pointed out, there is pronounced constriction of the tissues of the neck, with a staring, strange expression of the countenance. In the convulsions of tetanus the chin is pulled back toward the neck as though it were going through it.

The symptom just explained usually occurs in paroxysms with intermediate relaxation, while the jaw remains fixed and rigid in one position. This may be with the mouth open, or it may be closed.

Therapists say that lockjaw may attack suddenly, or may be chronic. The fact is that so-called tetanus is always an acute phase of a chronic, tissue abnormality. The phase of abnormality under discussion only occurs in persons who are subject to certain phases of toxic retention, and therefore, only affects those subject to glandular abnormality of a peculiar character, but particularly those whose kidneys have in a certain sense been inactive for a long time.

No person has ever been known to present the symptoms of tetanus whose general glandular condition was not chronically abnormal, and whose paramount glandular abnormality was that of the kidneys.

Therapeutists class tetanus as a nervous disease. It is not. It is but an acute phase of chronic condition incident to the phases of glandular abnormality already described. There is a very close resemblance between the muscular conduct in tetanus, and that in catalepsy. Indeed, cataleptic subjects are highly susceptible to the adverse process called lockjaw. Such persons are frequently found lockjawed as a result of adverse suggestion.

In the acute phase of lockjaw no food of any kind will be administered, and nothing will be administered except water. After the fixation of the muscles is broken, a light diet which will not adversely affect the glandular condition may be administered.

Under the application of the principles of Chiropractic, lockjaw usually disappears very quickly in from a few hours to two or three days.

Relating to remove occlusion causing lockjaw should be directed to freeing the first, second and third cervical trunks, and the cranial and visceral trunks ventral to the first three cervicals, and incidentally the third thoracic trunk areas.

Incident to this means of release, address must be made directly to the muscles of the mandible by direct application to them. Great care must be taken not to injure the mandible in such efforts. Of course, incident to all of these corrections, release to the kidney nerves is next in order, and after the convulsive period a careful address to the whole organism, to secure activity of the glandular body, is indicated.

CHOREA

This phase of abnormality is frequently called St. Vitus Dance, and occurs in many and varied ways. It is really a phase of paralysis in which the muscles, not quite correctly called voluntary, cease to respond to the control of the will.

One of the pronounced and peculiar symptoms of chorea is that the so-called voluntary muscles frequently act just the opposite to the way the victim desires, and always act spasmodically. That is, the legs and arms

cannot be kept still, but jerk about in any direction. The head and face is also jerked about into every possible position, and the face distorted into every imaginable grimace. One peculiar feature of this phase of abnormality is that, while the symptoms are pronounced, yet the vital forces are not greatly affected. There is usually a considerable impairment of digestion, absorption, depuration and assimilation, but these functions are in no sense adversely affected in ratio with the muscular symptoms.

The peculiar and marked activity of the muscles in their spasmodic conduct does not encroach upon the vitality of the person to anything like the extent that an observation of the case would cause one to suspect.

A person observing an ordinary case of chorea would not expect that the patient could endure the gravity of the convulsions for very long. However, this phase of abnormality may continue for weeks, months, and in some cases even for many years.

There is a phase of chorea, however, in which the attack is sudden and violent, and in which the convulsions are so intense as to render it necessary that the patient be held to prevent actual injury by the aimless and violent movements of the body. In the phase of this abnormality just indicated there is a high fever, and all of the vital functions are greatly prostrated, and if the case receives no adequate assistance, death usually occurs in from eight to ten days, but even in this character of case, if taken at the incipiency, and the application of the principles of Chiropractic should be faithfully applied, the convulsions would be stopped.

Chorea in its actual phases is of rare occurrence, and

if, at the appearance of the first or early symptoms, the case receives the application of the principles of Chiropractic, there will be no further progress, and the symptoms incident thereto will soon be aborted. However, it must not be overlooked that there is always a chronic tissue phase; which is constitutional, and which will require careful attention for some time to remove.

The longer the patient suffers from the adverse phase called chorea, the longer it will require, under the application of the principles of Chiropractic, to remove not only the convulsive phase, but the basic constitutional phase, for in such cases there will have been profound tissue injury, and the establishment of very adverse tissue and mental habits.

However, cases of twenty-four years standing have been corrected, and if the principles of Chiropractic are intelligently and carefully applied, success even in the very gravest cases is possible, and will usually be attained.

Relating to remove occlusion causing chorea will be to generally free the nerves extending through the trunks of the motor reactive centers of the vertebral column, particularly the suboccipital, the fifth and eighth cervical areas, and the third, seventh and twelfth thoracic areas, also the second and fourth lumbar areas, and many times the sciatic trunks at the sciatic foramina.

MENINGITIS

Meningitis so-called has received its name from the thought of the therapist that it is a disease of the membranes of the brain and spinal cord, called the meninges.

There is nothing to indicate that the theory of therapy just stated is any nearer the truth in this phase of abnormality than in brain fever, or any other adverse process in which there is pronounced brain abnormality.

The same strained theory is indulged in pleurisy and peritonitis—that those phases of abnormality are caused by the inflammation of the membrane, which theory is now known not to be true, and there is nothing more to indicate that so-called meningitis is an inflammation of the membranes of the brain or vertebral cord.

It is true that in meningitis there is congestion and inflammation in the great nerve centers including the brain, vertebral cord, solar ganglia and plexus, and the lesser trunks and ganglia, but this is also true of any grave phase of abnormality, and is no more true in this phase than in any other.

Therapists also designate many kinds of meningitis, such as acute and chronic, cerebro-spinal, tuberculosis, African meningitis, alcoholic meningitis, basillar meningitis, etc.; also metastic, internal and external meningitis. It is quite easily seen that these are all fantastic. It is true that this character of spasmodic attack is much more violent in some cases than in others, but this is to be accounted for upon a wholly different basis than that of the location affected.

Meningitis occurs sporadically, and in epidemic. The irritants which superinduce the adverse phase are environmental, and are therefore inoculatory. The environmental toxins are unquestionably atmospheric, and this statement is made because such toxins only affect those persons in whom there is the characteristic abnormality of a chronic nature, which predisposes the

person to such inoculation. In other words, such toxins only prostrate those whose resistance to that peculiar character of irritation has been overcome by a chronic process of tissue abnormality.

In any phase of meningitis the attack is sudden; the pronounced and primary outward symptoms being those indicated by the convulsions of the muscles at the base of the head, and relative to the great, glandular areas of the trunk. These muscles pull the head back, and increase the thoracico-lumbar curve until frequently only the buttock and back of the head touch the bed when the person is upon the dorsum.

The symptoms just described, it must be remembered are not confined to meningitis alone, but occur in many phases of abnormality.

Just why the dorsal muscles of the body are violently constricted does not at first occur to the student, and will only occur to him when he remembers that this phase of abnormality is being produced by chemical titillation of the periphery of visceral nerves which motor react through those nerves, called the gray rami communicans, which extend not only into the intervertebral foramina, but ramify the muscles dorsal to the foramina.

The phase of meningitis under discussion is conceived to be of a milder form, and therapists imagine that in this phase the brain is not so definitely involved. This, however, is not true; the whole difference consisting in the virility of the toxin.

Under the application of the principles of Chiropractic this phase of meningitis is usually very quickly overcome.

CEREBRO-SPINAL MENINGITIS

In so-called cerebro-spinal meningitis the gravity of the abnormality is profound. The attack is usually sudden, and the reaction to the brain is remarkable and very prostrating. The onset of this phase is sudden; beginning with a pronounced chill, usually accompanied with nausea and vomiting, with intense pain in the head and brain, radiated down the vertebral column, and especially centering at the base of the skull, and at the back of the neck down to the third thoracic vertebra. In a short time the muscular constriction becomes so great that only the occiput and sacrum rest upon the bed, if the patient is upon the dorsum.

The temperature soon becomes very high, and is as pronounced, and in ratio with the chill. However, from an external observation, the temperature does not seem to be so high, but there is intense internal fever. Frequently within a few hours after the onset, occlusion is so great that there is marked capillary hemorrhage in different areas of the skin, resulting in red spots, which suggested the name to the therapists of " spotted fever."

In so-called spotted fever, after the elevation of temperature has become marked, the patient usually becomes delirious, and as the temperature rises, lapses into profound unconsciousness of the nature of a coma.

In this phase of abnormality the body of the patient over its ventral aspect is very hypersensitive to the touch, but this does not in any sense apply to the dorsal parts of the body. The dorsal, muscular convulsion continues to the height of the temperature when the muscles remain constricted and fixed.

Incident to the symptoms of muscular convulsion, frequently there is violent jerking of the legs and arms, which extremities are moved into unusual positions, and sometimes are held in that attitude, resisting any ordinary effort to bring them to normal position.

The therapeutic world has suggested that cerebro-spinal meningitis is contagious, but there are no evidences tending to establish this as a fact, and there is every evidence tending to establish environmental poisoning as the cause of epidemics of this phase.

If at the very onset the principles of Chiropractic are carefully applied to the patient in this phase, the constrictions can be broken up within a few hours, anyway within two days, and the patient put upon the way to recovery.

Of course, it goes without saying that in cases that have been neglected, or cared for therapeutically, it is impossible to state a prognosis, for the possibilities of recovery depend a great deal upon what has been done. Where drugs have been administered, or injections made, the possibility of recovery is greatly lessened, but may not be rendered wholly impossible.

Diet in either phase of meningitis needs no particular discussion, for during the active phases no food of any kind should be administered. The patient should, however, be induced to drink copiously of soft water, about the temperature of spring water.

The patient should be placed in a comfortable bed, in a well ventilated room, which should be kept at a temperature of about eighty degrees. All clothing should be removed from his body, which should be covered with a linen sheet or light blanket, for

in these phases of abnormality it is of first importance to secure depuration and elimination of toxins which have precipitated in the body.

Incident to elimination, as suggested in the last paragraph, if there is an accumulation of fecal matter in the rectum, or the large bowel is found to be full, a thorough high enema should be administered, followed at twenty minute intervals by others until the bowel is emptied, and an aseptic condition obtained. The patient's skin should be moistened and thoroughly frictioned with a rough towel over the entire body three or four times each twenty-four hours, being careful not to wet too much of the body at one time.

Relating in these phases will, of course, be addressed to freeing the nerves to the dorsal muscles of the body at the motor reactive centers, and therefore, will be at the occipito-atlanto-axial area, and the eighth cervical, together with the third, seventh, eleventh and twelfth thoracic areas, and the second, fourth lumbar and sacro-sciatic areas.

In the application of these releases the Chiropractor should give very careful attention to releasing what might be called the " triangle of life," lying inferior to the skull, and between the vertebral column and the mandible, in which area it will be remembered there are the headward cervical ganglia, visceral, gangliated cords, the pneumogastric and vertebral accessory trunks, the hypoglossal, and glossopharyngeal trunks, and also the primary lateral divisions of the first, second and third cervical trunks. This area, and the kidney area of the vertebral column, will be found to be most definitely controlling.

Upon his coming to the case, the Chiropractor should relate the patient as often as every fifteen minutes for the first hour or two, and continue frequent relatings until relaxation has been obtained, and the disposition to reconstrict begins to disappear.

In connection with securing an aseptic condition of the large intestine, it is frequently advisable to very carefully dilate the rectum. This may be done with the fingers, or one versed in the use of it, may be called in to use a rectal speculum.

CHAPTER XL

EXCITERS AND NARCOTICS

Coffee—Tea—Tobacco—Alcohol—Opium—Habit-forming Drugs Generally

The terms used as the title of this chapter are thus used for the purpose of directing the mind to the constantly augmenting list of "habit-forming drugs."

The therapeutic world has seen fit to classify many of such drugs, if not all of them, as stimulants. The incorrectness of the word stimulant in this connection is at once apparent when it is remembered that the only stimulants are those substances which operate within the body as food; in other words, which may undergo digestion, absorption, and final assimilation into animate structures.

The truth will come as a surprise to laymen, and also to professional therapists, that all habit-forming drugs are exciters, and that none of them contain any element that may truthfully be classified as a stimulant.

Of course, some of these so-called agents may contain a very small amount of food, and to whatever extent they contain food they are stimulants, but it must be remembered that usually all of the food qualities of such agents are wholly overcome by their excitants.

No student, however, need be in error in the matter of deciding between stimulants and exciters, for it is a law in such matters that no substance stimulates except food, and that a substance which contains no food,

contains no stimulant, but is purely an exciter, and that any substance which is purely an exciter is also an irritant.

The test, then, by which it may be determined whether a substance is an exciter or a stimulant, is found in the further processes of the body. If it nutrifies and becomes a part of the animate economy it is a stimulant. If it does not it is an exciter, and also an irritant.

In this connection it must be remembered as a very important fact that the human organism continues its conduct of animation by a continual response to irritants. Irritation, therefore, is not necessarily unfriendly. It depends upon the amount.

Irritation, which excites activity in the organism, and produces no resultant depression, is beneficial, while irritation that overcomes tissue resistance and produces depression as a sequence is always disbeneficial.

The whole question of excitation by the agents under discussion is bottomed upon the rules laid down in the last paragraph. It is the general habit of incomprehensive minds to reach the conclusion, if an agent is an exciter that, because of that fact, it should not be used, but this would be to fly directly in the face of all things natural.

The unobstructed rays of the sun are exciters, and if had at proper times, and in proper amount produce splendid physiologic results, but if endured too long and in a trying attitude, they become irritants of a profound character, even producing complete prostration.

The application of water is an irritant. A small amount, judiciously applied, produces good results, and is

beneficial. Excessively applied it becomes an exciter, an irritation; an agent of destruction, and so on throughout the entire realm of nature.

The author desires to be understood as holding to the proposition as a fact that the Creator has made nothing without a purpose; that all things in our earthly environment are intended for use, but that it is of the utmost importance, and is absolutely necessary for human beings to learn what are the intended uses of everything, and not to cast certain things aside as being useless, but to remember that the obligation of life has not been met until the exact use of each thing has been ascertained.

By way of additional illustration, let it be remembered that any chemical compound that is taken into the body irritates the periphery of nerves, producing motor reaction, and functional activity. A substance is ingested for food; it titillates the periphery of nerves in the mouth and the flow of mucous and saliva is immediately produced by motor reaction, and the same juice-producing function continues throughout the alimentary canal.

If the substance ingested is of a chemical formula to operate as an excessive irritant, then the motor reaction produced will be destructive, whereas if it only excites the physiologic conduct it is constructive and beneficial.

The whole question of stimulants and exciters may be resolved upon the basis of the rules laid down in this chapter thus far.

COFFEE

Coffee is an exciter. As used upon the modern table, it contains no food, and this fact in itself renders its use somewhat questionable.

It is well known that in some individuals the taking of coffee produces a mild excitement, which results in arousing physiologic activity with no depressing after-effects. To such the proper use of coffee is not injurious.

It is equally well known that coffee taken into the alimentary canal of certain persons, and absorbed, acts in the organism as a profound irritant, even to the extent of causing sufficient motor reaction to result in tremulous muscular conduct, especially of the extremities, and interference with the muscles of the heart and large blood vessels to the extent of producing palpitation of the heart, and interfering with the rhythm of the systoles and diastoles, and sometimes, before being observed, seriously interferes with digestion. To such persons the use of coffee in any manner is very deleterious, and it should not be used.

The basic principle of coffee is caffein, which has the chemical qualities of curdling cream or milk, and for this reason particularly, and others incidentally, no cream or milk should ever be used in coffee; for it immediately becomes an indigestible curd, of such a tough nature as to enter into and remain in the recesses of the stomach and intestines, putrefying, and becoming an irritant of another and more destructive form.

If coffee is to be taken at all, there is but one correct way to do it, and that is to take it black, with neither milk, cream nor sugar. If one does not wish it sufficiently to take it in this form; he should refuse it altogether.

TEA

What has been said about coffee applies equally to tea, so no extended discussion need be indulged on this subject.

There is no question that at our modern tables today, thousands of persons are destroying their health by the continual use of tea, which operates upon them as a pronounced irritant, causing many phases of abnormality.

If tea is to be taken at all, which the author particularly discourages, it should be taken with a very small amount of milk or cream; for the basic principle of tea is tannin, which has a profound affinity for albumin, and if this affinity is not destroyed before it enters the stomach, it will produce a reaction from the stomach walls, which is very deleterious, rendering it hard, tough, and inactive.

TOBACCO

Tobacco, in the modern form in which it is used, is both an exciter and narcotic. In its original form as a plant it contains food values, for it furnishes the whole support to the tobacco worm. But as it is chewed, smoked or snuffed, there is no opportunity for it to furnish any food value to the human organism.

The reason tobacco is classified as an exciter and narcotic is that its first effect is to abnormally excite the organism, followed by a depressing effect equal to the excitation, and this is the test of exciters and narcotics.

It is true that the human organism soon learns to accommodate itself to both the excitement and depression, but always with some degree of injury; at least by the injury of being required to put forth energy for the accomplishment of a purpose wholly unnecessary, which, by an economic consideration, must be placed on the loss side of the account.

There are ten thousand arguments in favor of the use of tobacco, such as, it is good for digestion; it tends to keep off colds; it keeps away toxins of disease; it makes one a good fellow; it is a necessary element to congeniality; my great grandfather used it and lived to be a hundred years old, and therefore it don't hurt me, and so on, and so on! None of these ideas amount to a reason, for persons who do not use tobacco are as congenial, as friendly, and as healthy as those who do.

In the process of chewing tobacco, the mucous glands of the mouth, and the salivary glands accessory thereto are constantly excited to unusual work, and therefore, are rendered incapable of administering to food when taken normally. It is impossible that any good can be derived from such a useless habit. The tobacco chewer must either expectorate the juice or swallow it. If he expectorates it, he is a subject of filthiness incapable of expression. If he swallows it, it does him injury in multifold ways, and to an extent beyond expression. Therefore, no human being, who either has proper respect for himself, or for others will permit himself to do so foolish a thing as to chew tobacco.

The smoker must make his selection—a pipe, cigar or cigarette, and these are mentioned in the order of their injuriousness. The pipe least, the cigar next, the cigarette worst, and this last beyond computation.

No more inane, idiotic or foolish performance is indulged in by the human family than that of putting the crumbled leaves of a weed into a pipe and lighting it, and pulling the smoke into the mouth and blowing it out again; or of rolling the leaves of a weed and wrapping them with another, and putting fire upon one end,

and a very questionable object upon the other, and drawing smoke through the leaves into the mouth and nose, rendering the whole area unsanitary and obnoxious, or still worse, shaking the finely ground leaves of a weed into a paper and rolling it up, and hanging one end of it into a distorted orifice, and putting fire on the other end, and gently allowing the fumes to injure the entire respiratory tract, the tissues of the throat, the larynx and nose, while it also gently steals away the brains.

If smoking could do any person any good, the stench, the sputum, the discoloration, the horrible breath, and all of the adverse things that go with it, the ridiculousness of it, might be borne; yes, would be borne. But when it cannot possibly do any person any good, and it is well known that it does many persons much harm, it seems that as a matter of judicious intelligence, all persons would abstain from its use.

But the most deplorable part of the whole situation is that many persons, and especially young persons, are very gravely injured by the use of tobacco, especially by the use of the cigarette.

No man who smokes cigarettes to the extent of a habit has a clear and normal voice, for the influence upon the vocal cords, the pillars of the fauces and the nasal meatus are sure to change the voice. Young persons, not yet having reached maturity, are positively injured in their brains sufficiently to retard or abort mental development.

ALCOHOL

This exciter and narcotic is used by the human family in a multitude of ways. It has long been used as a

necessary element in the securing of tinctures, and as a component in the admixture of many kinds of medicine by therapy, and it forms the basic ingredient of a very large number of beverages.

Alcohol is a product in nature which is essential to all foods. It is a preserver, and there is no substance which contains nutriment that does not also contain alcohol, but in this form it is only a preserver, and a physiologic exciter, and doubtless it was in this form that alcohol was intended to be used by the human family.

Man, by his ingenuity has learned to separate alcohol to a large extent from other ingredients, and to secure it in concentrated form, in which form it is always an exciter of a profound quality, producing an equally profound narcotic or depressing effect. In other words, alcohol excites to the point of irritation, because it overcomes tissue resistance, and then depression must be endured until rehabilitation of disintegrated or destroyed tissues, incident to the excitement, has been accomplished.

The use of alcohol, then, in concentrated form is always deleterious, yet in this further connection it must be remembered that the use of alcohol in proper quantity is an absolute necessity.

It is not necessary to go into any of the details of the injury that the human family has suffered as a result of the use of concentrated alcohol, for those injuries are altogether too well known, and the subject needs no comment. But in this connection the caution is interposed that even in a subject of the simplicity of the one under discussion, the human family at this time indulges in some very remarkable errors; chief among which is

the conclusion that because the use of concentrated alcohol has done much damage, that therefore its use must not only be stopped but prohibited.

The careful thinker will observe that, with regard to alcohol, the thing to be altogether desired is first to find out in what form, and to what extent diffused alcohol should be used, and not to attempt to put away, and wholly disuse, a necessary element in the process of nutrition.

In the process of developing civilization the human family have gone from raw foods to cooked foods, and from foods in their original condition to foods wholly denuded of their normal alcoholic value, in that the skins of fruits are thrown away, with the skins of cereals and with them practically all of the alcohol.

Meats are cooked until their alcoholic value is dissipated, and so in this time the human family lives from a dietary, almost wholly separated from its alcoholic value.

If it were not for the conditions outlined in the preceding paragraph, the use of artificially produced alcohol might be eschewed with safety, but it is the author's opinion that until in some manner humanity learns to retain its civilization, and still to return to normal food, it would be extremely dangerous to prohibit the use of alcohol.

As strange as it seems, human beings will go to excess in all of the good and virtuous things of this life. There are those who kill themselves by excessive venery, by excessive eating, by excessive bathing, and by excess in exercise; and every year there are more who destroy themselves by the means mentioned than ever in the

same time destroyed themselves by alcohol *per se*. Yet, society would not think of prohibiting sex relation, nor eating food, nor proper bathing, nor the taking of proper exercises. Then, why foolishly concentrate upon the proposition of prohibiting the use of alcohol when excesses in that direction are no worse than they are in the others mentioned.

The author wishes clearly to be understood as being within the confines, and of teaching temperance in all things, but urges that the solution of the problem is the production of a normal diet, and when a normal diet has been produced, which contains the original and normal per cent of alcohol in all food products, then should come the prohibition of the uses of extracted and concentrated alcohol, but that until that time its use should be wisely controlled, just as sex indulgence, eating, bathing and exercise must always be controlled.

The symptoms of drunkenness, which is the excited effect of the use of concentrated alcohol, need not be described, for they are too familiar to the ordinary observer, but the pathologic effect needs a few suggestions.

The titillation of the periphery of the nerves in the stomach and alimentary canal, upon the taking of alcoholic beverages results in motor reaction, and changing of vibration to the brain, so that from the brain cortex a motor reactive effect is sent widely, and if a sufficient amount of alcohol is used, to the entire organism.

Incidentally, intestinal absorption of the beverage is accomplished rapidly, for all beverages can be absorbed without digestion, and the alcoholic ingredient in these

soon precipitates in any stased areas of the body, and there, by irritation, produces other and further motor reactive effects. It can be seen that there is no other nor surer way to accomplish complete deterioration of the organism than by the regular, continuous, and excessive drinking of alcoholic beverages.

Here again, the organism is able to accommodate itself to both the exciting and depressing effects of alcohol, and yet, notwithstanding that fact, many organisms undergo great damage from the use of alcohol in excess of tissue resistance.

OPIUM, AND HABIT-FORMING DRUGS

This sub-title is used merely for the purpose of introducing the subject of the so-called habit-forming drugs, aside from those already mentioned. As everybody knows these consist of opium, morphine, cocaine, chloral, heroin, and a large number of others which it is not necessary to mention in this connection.

The reason that coffee, tea, tobacco, alcohol, morphine, and the other so-called habit-forming drugs are thus named is because following the excitation there is the depressing effect, which in due time calls for the excitant phase again.

It is remarkable that a first experience with any of these drugs produces a temporary revulsion to their second use, for there is retained in the memory of the subject the distressing sensation of their depressing effects, but from many repetitions in the milder drugs, to a few repetitions in the stronger ones, this mental sense of protection practically, and sometimes wholly, disappears.

In the use of these drugs, which are now more definitely under discussion, the excitement and irritation is so profound, and the motor reaction so intense, and the tissue injury resulting therefrom so extensive that only a few repetitions of the use of the drug serves to change the brain structure, and therefore, the mind, to such an extent that the desire for the use of the drug is wholly unaccompanied with caution and in a short time the brain is so changed, and therefore the mind, that it is impossible for the subject to form a resolution against the use of the drug. This is the most pitiable condition into which the human being can be placed.

From what has been said, it can be seen that persons addicted to the use of habit-forming drugs are not to be blamed, but are to be looked upon as demented, and are therefore to be sequestered, and protected against themselves until sufficient time has elapsed for their brain and body tissue to completely rehabilitate to the normal, when mind will again be restored, and the ability to resolve against the use of such drugs will be had by the victim.

The therapeutic world is definitely to blame for the use of such drugs, for it has brought them into existence, and it uses them in their destructive form in its practice, for which there is no justification, for there is nothing curative about any such drugs.

The use of exciters and narcotics came into existence by reason of the supreme desire of the human family to avoid pain; seeming to forget that pain is the nearest and best friend, for it advises of the abnormal condition, and to allay pain, and not remove the abnormal condition is to destroy animation.

The symptoms of the habitual use of the habit-forming drugs are so many and numerous as to be incapable of statement, but there are a few symptoms that are general.

Voracious appetite, intermittent with no appetite, palor and atrophy with perverted tastes are regular. Indisposition to exercise, tremulous conduct, a growing disposition to prevarication, and to imagining the existence of things which do not exist, are the most pronounced symptoms.

The application of the principles of Chiropractic reaches its highest and most useful office in assisting in removing the pathologic difficulties of the addicts to habit-forming drugs, and this statement is true of all the habit-forming drugs. In some of the milder drugs, such as coffee, tea, tobacco, etc., restoration can be accomplished without sanitarium surroundings, because the patient retains the ability to resolve against the use of the drug. But in the more pronounced addicts sanitarium conditions are absolutely necessary.

In recovering patients from the use of opium, and all that array of habit-forming drugs, it is not necessary only that the patient shall be confined in a sanitarium, but that he shall have the continual attention and assistance of companions, who are constantly alert to see that he does not obtain the drug, for such persons are unusually acute in such matters, and will not hesitate to sink to any degree of dishonesty or deception to obtain what they want.

The student must remember that in conducting the management of the drug addict, no matter of what standing the person may have been, or what degree of

honor he has been reputed to have, he must, nevertheless, be watched and protected from obtaining the drug, and in that particular his word must not be taken for anything. Nothing will succeed but strict surveillance, and the prevention and closing of all avenues through or by means of which he might by any possibility obtain the drug.

Relating to remove the tissue conditions produced by any of the habit-forming drugs, if taken per mouth, will primarily be release of nerves at the fourth thoracic area, the seventh thoracic area, and the eleventh and twelfth thoracic areas. If the drug is injected into the arm, of course, the basic correction will be to release the nerves of the brachial plexus, and if injected elsewhere, the nerves to the area of injection will be primary.

It must be observed, however, that relating in such cases must always be constitutional, because the entire organism will be depleted, and therefore, diet, ventilation, clothing, housing, etc., are of exceeding importance—peculiarly the diet, which should consist of light, nutritious, easily digested, and wholesome foods taken upon a basis of monodiet.

It is needless to say that the drug must be kept away from the patient until he has recovered his complete tissue integrity, and therefore has had restored to him his complete mental faculties, sufficiently that he can form a resolution of such profundity as to remain away from the use of the drug.

CHAPTER XLI

PROCREATION—INCIDENTS

Normal Formation—Puberty—Menstruation—Conception —Gestation—Parturition—Lactation— Puerperal Fever—Menopause

The procreative apparatus is the most important part of the human anatomy, because it presents the machinery through the use of which all human existence must be instituted and perpetuated.

To not only understand the anatomy of the procreative organs, then, but to fully understand their function, to know when they are normal and to know how to keep them normal, is of the very first importance.

The procreative apparatus consists of two substantially equally divided parts—male and female, which parts when considered together constitute a complete or whole procreative apparatus, none of the parts of which, considered by themselves are of any procreative value.

NORMAL FORMATION

The sex apparatus of the male and female have normal formation, although there is no definite standard of formation. But the development of the sex apparatus in each case is as marked and individual as are the persons of different people, yet, notwithstanding these multifold deviations, the sex apparatus of each human being may present the normal in construction.

It is not the purpose here to give the anatomy of these parts. It is sufficient to say that the sex apparatus of the female is normally formed if the uterus has unobstructedly reached its maturity, and occupies its free and mobile position in the pelvis, with its cervix projected into the vagina, sufficiently to give room for the fornices, in order that its external os shall have freedom of emission into the vagina and intake from the vagina in an unobstructed manner, and if the vagina has been permitted by relative anatomic incidents to grow to its maturity, and reach the surface of the body in a vaginal orifice, which is anatomically protected by a perforate hymen; and if there is a clitoris which has reached maturity without obstruction, the glans of which is free under the prepuce, that is, loosely related around the corona glandis; and, of course, if the ovaries have been permitted to normally form without nerve interference, so that they have unobstructedly reached maturity, and are related to the fimbriated extremities of the Fallopian tubes, which have developed unobstructedly in such manner that ova may pass from the Graafian follicles through those tubes and into the uterus, and thus unobstructedly through the cervix into the vagina.

The male procreative apparatus may be said to be normally formed if the penis has developed without anomalous presentation to a size well calculated to be accommodated by the normal vagina, and if the glans is well formed and protected by a foreskin, which without being tight, nor long, protects the corona glandis, and forms a prepuce of such length as to permit erection of the organ without undue traction; provided

the testes have been normally formed, and have been permitted without obstruction to descend into the scrotum, with the spermatic cord supported at ease within the external abdominal ring through the inguinal canal, and through the visceral ring, while the vas deferens extends to and forms in the ordinary way the seminal vesicles, with the seminal and ejaculatory ducts; all being constructed in such manner that spermatazoa, being produced in the cell nests of the epithelium of the tubules of the testes, have free transmission through the vas deferens, seminal ducts and ejaculatory tubes, and then, through the urethra, to be projected from the meatus of the glans.

There is a wonderful range of difference in size of these organs, and it is possible for the male organ to be anomalously large. It is also possible for it to be anomalously small, so much so in either case as to render its use as a procreative organ impossible.

The same facts as stated with regard to the male organs are equally true of the female. The clitoris may be anomalously large, so that it renders procreative relation impossible, and it may be so small as to not function, or may be completely absent.

Occasionally there is the monstrous presentation of hermaphrodite, which is a person who presents neither the male or female procreative organs normally, but typically at least presents both characters of organs somewhat developed. Cases of this kind have been observed where neither of the set of organs were sufficiently developed to function in any way, and there are cases on record where both sets of organs have been sufficiently presented that the person could enter into

copulative relation either as a man or a woman. But in such cases there is, fortunately, no procreative function.

PUBERTY

Puberty is a word, the use of which has much confusion. It originally came from the fact that that part of the human organism ventral to the pubis is at sex maturity covered with hair. In other words, then, puberty was held to be the time at which hair grew on the skin over the pubis.

Actually, the growth of hair at the pubis, and procreative maturity occur concomitantly, but in the more modern sense, the word puberty is confined to the time at which the male develops the power to beget offspring and when the female becomes capable of being impregnated, or has the capacity to conceive.

It must be understood that both the male and female are generally conceived to have arrived at puberty, even though, because of anomalous or abnormal formation of some part of the procreative apparatus, they are incapable of begetting or conceiving offspring. Therefore, it may be even more accurate to say that puberty is reached when the male develops the ability to emit semen from the testes, and the female to emit ova from the ovaries, and to perform the process of menstruation.

As a comparative proposition, between the human animal and other animals, even those most like man, one of the most marked and distinctive differences is that the external genitalia of both male and female in the human species is covered with thick, soft hair, while

the corresponding parts of the so-called lower animals are hairless. The author deems this a very significant fact as related to the subject of evolution.

MENSTRUATION

At the age of puberty, and usually at the period when the female begins a growth of hair at the pubis, the uterus undergoes rapid development in size, and in other ways, and presents the first menstruation.

Menstruation occurs concomitantly with the discharge of the first developed ovum from the ovary of the subject; at least coincident with its reaching the ampulla of the Fallopian tube. The tissue condition and functional process called menstruation is a periodic inflammation of the walls of the uterus, peculiarly the submucous and mucous lining thereof, which normally occurs each twenty-eight days.

Incident to the inflammatory tissue condition there occurs a desquamation of the uterine surface of the mucous lining of the uterus accompanied normally by an amber colored, colloidal discharge; which in modern women, bred for generations in civilization, is somewhat red, and in those who have lived in the distinctly social life for many generations, actually contains blood.

There is no doubt that actual hemorrhage occurring as incident to menstruation is abnormal, and is an anomalous condition, brought about by a long continued and too great concentration upon the subject of sex, in the development of social civilization. This conclusion is reached because savage women, and those of the peasantry of different countries of the world, who have

lived in the open and have roughed it, do not present blood hemorrhage, but only a discolored lymph discharge at the menstrual epoch.

The periodic discharge of the menses in the normal woman is accompanied by the discharge of ova, and of course, accumulated debris from the ovaries, Fallopian tubes and uterns is depurated or eliminated at this time so that the office of menstruation is not only procreative but is depuratory.

Therapists presume that at each menstrual period one ovum is discharged through the uterus and vagina. However, there is nothing to sustain this proposition, but the actual experience of the human family proves it to be quite otherwise; for if it were not otherwise there would not be twins or many times multiple births, and if but one ovum were discharged, the woman could only be impregnated during the menstrual flow, which is found not to be true.

There is little doubt that it was formative intention that the woman should only be impregnated at the period of menstruation, but, because of the unusual attention to sex as incident to the development of social civilization, women have been rendered so abnormal that many women can be impregnated any time during the month, and it is usual with all women that they may be impregnated immediately before, or immediately after, the menstrual flow.

However, there is occasionally a woman who can only be impregnated during the period of menstruation.

A reasonably normal woman will continue to menstruate so long as there is any remnant of the ovaries, or accessory ovaries left to her, but will cease

menstruation, even within the fruitful age, if all of the ovarian substance is extirpated.

The fact mentioned in the last paragraph is stated because occasionally there is presented a woman who has undergone extirpation of the ovaries, who nevertheless menstruates, and there have been cases in which such a woman has conceived. Such cases are explainable upon the fact that some part of an ovary or ovaries, or accessory ovary, was left.

CONCEPTION

Conception consists in three processes: (1) the deposit of a virile spermatazoon in the vagina, which has free access to a mature ovum; (2) the striking of the ovum by the spermatazoon, which penetrates into it—this process being called impregnation; and (3) the levitation of the impregnated ovum to some surface of the uterus, the wall of which has been roughened by the desquamation of menstruation, where it strikes and undergoes the process of imbedding. When these three phases of process have been accomplished, substantially in the order named, conception has taken place.

There are no symptoms of conception which are sufficiently manifested that they may be detected. There is, however, a psychic, and therefore, mental change, which occurs without the consciousness of the woman, but nevertheless occurs. It is the belief of the author that in the future developnent of the human family the consciousness of conception will be developed in women, so that she will know the instant she has conceived.

GESTATION

Gestation is the name given to the period which intervenes between conception, and the full development of the fetus, or what is ordinarily called full term.

Therapists state many symptoms of conception such as morning sickness, discoloration of the skin, especially of the forehead, pain in the muscles of the loins, pains in the legs, tendency to dropsy in the feet, enlargement and evolution of the uterus, enlargement of the abdomen, the observation of movement, and finally the fetal heart beat, and many others. None of these, however, are distinctly reliable, since all of them have many times been mistaken.

In a normal woman the only symptoms absolutely proving the presence of an embryo or fetus in gestation is the timely evolution of the uterus head ventrally toward the abdominal wall, the enlargement of the uterus, the thickening of the lumbar muscles in relation with the crests of the innominates, the enlargement of the mammary glands, and in due time the possibility of distinguishing the fetal heart beat, and observing fetal movement.

Of course, some of these are not absolute, for a woman may undergo evolution and enlargement of the uterus, the change in the abdominal muscles and the enlargement of the mammary glands incident to a tumor in the uterus, and even surgeons of much ability have been deceived by these symptoms to the extent of starting to operate to remove tumor, only to find that the woman was actually in the period of gestation and in the converse, diagnosis of gestation has been made by the most eminent therapists, when later it was found that conception had not occurred, but that there was a uterine tumor.

PARTURITION

Parturition is the act or process of the woman giving birth to a child. The common names for this process are term-time, full term, delivery and giving birth.

At full term the fetus presents itself against the membranes separating it from the cervix of the uterus. The muscles of the fundus and body of the uterus, and incidentally those of the lumbar region and abdominal walls spasmodically press it against those membranes.

After this pressure process has gone on for a time, the amniotic sac ruptures, and there is the "flowing of waters." The water is for the purpose of lubricating and preparing the cervical tract and vagina for the passage of the fetus. Incident to the muscular squeezing process referred to, the cervix of the uterus is rapidly dilated, so that shortly following the rupture of the amniotic sac, the fetus passes into the cervix, and engages in the pelvic outlet, through which it passes into the vagina, and thence through the pubic arch to the external, vaginal orifice.

The attitude of the fetus at term is called its presentation, the normal position being head first, with the arms folded so as not to protrude. In this position it should be born with an occipital presentation. Sometimes there is a face presentation.

The other presentations are one arm and shoulder; shoulder presentation; both arms; a leg presentation; both legs; and breach presentation. In practically all of these the woman must have assistance or delivery cannot be accomplished.

The assistance given to a woman in delivery is usually classified under the name obstetrics, or midwifery, and

it is sometimes necessary for assistance in these abnormal presentations. For instance in breach presentations, performing reversion, or pushing the fetus up turning it end for end, so as to have a head presentation, or to convert any of the other presentations, which render birth impossible, into positions in which the child can be born.

When the fetus has passed through the vagina to the external environment birth is accomplished. At this time the umbilical cord is tied in two places, and cut between them, after which the obstetrician proceeds with the management of the delivery of the placenta, and its attached fetal membranes. This is usually called " after birth." When the after birth has been delivered, and contraction of the uterus has occurred, or has been secured, the parturition is complete, and the period of gestation has been fully terminated.

LACTATION

Lactation is the name given to the milk-giving function of the woman, or to any other mammalian mother.

Normally, from the time of the formation of the fetus until delivery, the mammary glands of the woman have been undergoing changes preparatory to lactation or milk giving, and at the time of delivery she is prepared to furnish first food to her offspring.

The symptoms indicating lactating preparation and capacity are the enlargement of the glands, the discoloration of the lunula and the enlargement and reddening of the nipples. Care must be taken not to mistake accumulation of fat for the glandular enlargement necessary to lactation.

It will be recalled that the nerves from the brachial plexus, and from the first to the third thoracic trunks inclusive, particularly stimulate the tissues of the mammary glands, and if there is grave occlusion of these nerves in whole or in part there will be a corresponding lessening of the production of milk.

Many women require application of the principles of Chiropractic during the last weeks of the period of gestation in order to give them capacity for sufficient lactation, and this has never been known to fail of the proper result if faithfully applied.

It is hardly necessary to say that to produce sufficient lactation that the mother may support her offspring, relating should be performed for at least the last three months of the period of gestation directed to the releasing of the nerves of the brachial plexus, and the headward thoracics, to and including the third.

PUERPERAL FEVER

It sometimes happens that following delivery by reason of occlusion of stimulus to the uterine walls, there is bad contraction accompanied by retention of substances that should have undergone free depuration which under the circumstances exosmose from the uterine cavity into the uterine wall. In such conditions sepsis is said to have occurred, and a fever follows which is called puerperal fever.

It must be remembered that nothing of this kind would occur except under an abnormal condition of the uterus, which results from occlusion of nerves to that organ. This is a very dangerous phase of tissue abnormality, and should at once have proper and painstaking attention.

In puerperal fever two things are paramountly necessary: (1) all foreign substances must be removed; there must be free drainage, and sanitary opportunity for depuration; and (2) that the nerves to the uterus and vaginal tract shall be wholly freed from occlusion. The first of these can be accomplished by proper nurse-attention, but the second can only be accomplished by the proper and intelligent application of the principles of Chiropractic.

Relating to remove puerperal fever is peculiarly directed to the nerves of the thoracico-lumbar area, incidentally to the lumbo-sacral area, and the sacro-iliac areas; the specific centers of application being the twelfth thoracic and the second lumbar areas. No case of puerperal fever has ever been known to last more than twenty-four hours under the application of the principles of Chiropractic as outlined.

MENOPAUSE

Menopause is the name given to that period in a woman's life when she normally ceases to menstruate, or in other words when she normally ceases to present each twenty-eight days the catamenial discharge.

The menopause marks the termination of the fruitful period of the woman. After this period she is incapable of impregnation. It is her emancipation from child-bearing and should be a period looked forward to and enjoyed by all womankind.

Therapists have done the human family much harm by suggesting that it is at the period of the menopause that there is a change of life, and that incident thereto women are susceptible to all kinds of diseases and

adverse attacks. This is not in any sense true, but under the adverse conditions incident to social life women usually undergo a great deal of stress and trouble at this time. However, it must be remembered that it is not normal for women to do so. If a woman has lived normally, she approaches this period in the same way that ripened grain or fruit reaches its maturity, without stress and without trouble. Her periodic discharges should become less and finally skip a few with a return, and then cease altogether.

It should be the pride and aim of every woman to live her sex life so normally that when she comes to the menopause, ordinarily called "change of life," she will pass it by as undisturbed as a flower closes its petals in token of maturity. The menopause is not, as women have been taught to think, an evidence of old age, but freedom from the responsibility of childbearing.

At the menopause the ovaries of the woman do not shrink as the therapeutic world has erroneously taught, but if the woman is normal they remain, functioning to the production of virile womanhood, but not to the production of ova.

The Fallopian tubes and uterus still remain depuratory channels of great importance, and the woman is as capable in sex life as before that change occurred.

CHAPTER XLII

SEX ABNORMALITY

Anomalous Formation—Amenorrhea—Dysmenorrhea—Prolapsus of Uterus—Flexions

Any organ of the organism in order to function correctly, or physiologically, must, as a prerequisite, have normal construction and normal maintenance. This proposition is just as true of the sex organs as of any other.

Because of the peculiar concentration of the human family upon the subject of sex, in the development of the social fabric and so-called civilization, the subject of sex has had very little, careful, painstaking, open and honest consideration, and this is much to be regretted, for it has greatly retarded the evolution of the human family.

Humanity has generally treated the subject of the organs of sex as though they were never incorrectly formed. Society has apparently relied upon the fact that the sex apparatus is always normal in its construction or presentation, while nothing can be further from the truth.

Because of the emotional concentration upon the subject of sex, there is more idiosyncrasy of construction of the sex organs than of any other organs of the body, and, because of the extreme sensitiveness of the sex organs, their abnormal or anomalous construction results in more harm to the organism than the anomalous construction of any other organs.

ANOMALOUS FORMATION

In the chapter on "Orificial Abnormality" herein, this subject has received an extended discussion, to which the student is here definitely referred.

In this connection two phases of anomalous presentation of sex organs are paramountly referred to:

The first of these is the long or tight foreskin of the male; the short frenum; and the abnormally small urinary meatus. Either of these, or a combination of them, presents a most irritating situation to the male organism, which, if uncorrected, may cause a wide range of abnormality, such as congestion of the brain, weak or irritated eyes, nasal catarrh, pharyngitis, laryngitis, goitre, indigestion, abnormality of the large digestive glands, kidney abnormality, and rectal pathology, or a combination of these.

The second of these phases is the presentation in the female of the redundant, tight, or adhered foreskin. The redundant foreskin presents an enswathed, irritated clitoris, or, if the foreskin is closed—a hooded clitoris; while the tight foreskin presents either an adhered, or choked clitoris.

It will be remembered that the clitoris is the "touch button," sexually speaking, to the woman's organism, and either of the anomalous conditions described in the preceding paragraph, presents a continuing irritation, which, by motor reaction, agitates the brain cortex, and through the brain, practically the whole organism, definitely and pronouncedly any parts of it, that, because of subluxation or tissue degeneracy have less than normal resistance.

The irritation referred to in the preceding paragraph

may cause all sorts of brain irritation, ranging from hypersensitiveness, ordinarily called nervousness, to the most extravagant insanity; and such tissue abnormality as nasal catarrh, deafness, pharyngitis, laryngitis, goitre, indigestion, abnormality of the large digestive glands, the kidneys, suprarenals, and also rectal pathology, and all characters of uterine and vaginal abnormality, or a combination of any or all of these.

An anomalous presentation of the labia minora, in which condition it takes on an extended, or dog-eared form, to such extent as to continually protrude from the pudendal slit, beyond the protection of the labia majora; or when the labia are presented asymmetrically; that is to say, one labium developed into a dog-eared protrusion, while the other is abnormally small or not presented, result in the same character of irritation as those mentioned with regard to the clitoris, but they are usually more pronounced in their effect. They usually become pronounced in their effects as puberty approaches and on through the woman's life.

The irritation from the anomalies described in the preceding paragraph causes a continuous motor reaction which may result in any of the phases of abnormality suggested in connection with the irritations of the clitoris; but are more apt to cause emotional, and therefore mental disturbances, and it was the symptoms arising from these conditions that suggested the name, nymphomania, as characterizing the emotional insanity of women thus affected, although the tissue facts herein stated were not known to therapeutists.

It goes without saying that in anomalous foreskin

presentation of both male and female, the proper remedy is circumcision, by the latest orificial technique, and excision of the mal-presented nymphae in conformity with the results obtained by the most scientific orificialists, who practice the Pratt system of correction.

AMENORRHEA

Amenorrhea distinctly refers to suppression of the menses, occurring as incident to any or all phases of abnormality. This phase or symptom occurs frequently in connection with all kinds of febrile conditions, and indeed many phases of so-called constitutional disease, where vitality is needed by the organism for resistance rather than for the procreative purpose.

The regular flow of the menses is frequently interrupted as a result of great exhaustion or depletion. It has been known to occur as incident to a long fast, and frequently occurs as incident to emotional shock, etc.

Catching cold, as incident to or at the time of menstruation, or undergoing some character of shock at the time, very frequently results in suppression of the menses or amenorrhea; and women should be very careful during the menstrual flow in their conduct, for a little carelessness or exposure, at such time may result in an adverse process, difficult to remove, very painful to endure, and greatly endangering animation.

Women, at or near the menstrual epoch should be particularly careful not to get the feet wet or damp, nor to undergo unusual exposure to cold or moisture, and should not under any circumstances submerge the body in water, either in the bath or in the swimming pool—out-doors or in.

The irritation incident to the sex organs described under, anomalous formations, in this chapter are the most fruitful causes of amenorrhea. It is almost universal that girls presenting anomalous sex orifices begin menstruation very abnormally; sometimes presenting a very early flow, which is thereafter very irregular, or, which is the most usual, the first menstrual epoch is much delayed with great irregularity thereafter.

The irregularity of the menstrual flow referred to in the preceding paragraph may consist in excessive hemorrhage; but usually consists in a very scanty flow, with irregularity as to time, sometimes occurring twice or more times a month, and then skipping several months. Frequently such girls only menstruate once in six months, or once a year, and sometimes cease menstruation for years.

It can be well understood that where the anomalous situation, and its resultants are as grave as just outlined, the victim of them cannot be otherwise than gravely abnormal in all parts of the organism. It is girls like these that are taken off with what therapy designates as galloping consumption, nervous decline and nervous exhaustion. Therapeutic doctors frequently ascribe the sudden loss of vitality of such girls to adverse love affairs, and many other foolish things, because they do not understand the pathologic situation.

Usually in those cases, where girls at school or college are considered very delicate and nervous, and undergo prostration, and must be taken out of school, anomalous sex orifices are the underlying cause of all the trouble, and if the doctors in attendance would cease to perform their foolish operations upon the nose, eyes,

ears, and throat, and would give as careful and skilled attention to the other end of the trunk, all of these lamentable difficulties of girls and women would cease.

When girls with abnormal sex orifices marry, which they do too often, one of two things result: they either fail to enter into normal, wifely sex relation, thus rendering their marriage a failure; or they sufficiently enter into the sex relation to conceive and bring forth children with prolonged travail and great agony. It is such women that keep the surgeons busy, for they nearly always undergo lacerations in expelling the fetus, and almost universally present in their children the same character of sex anomalies which they themselves have. It is a dark picture, but must be painted, because a little frank, common sense for a few generations would fully remove these anomalies.

If a woman who presents the anomalies described in the last two paragraphs succeeds in making her way through the other departments of life, at about thirty to thirty-five years of age she is almost certain to present a goitre, and will be sure to do so if she lives in a goitre territory.

The insane asylums, and places of prostitution are occupied by women who are the victims of the character of anomalies described in this and the chapter entitled "Orificial Abnormality."

DYSMENORRHEA

Dysmenorrhea refers to painful menstruation.

This subject needs no extended discussion, for it never occurs except when some of the anomalous conditions that have just been detailed are present.

Dysmenorrhea is a terrible condition. It most frequently results from the fact that, responding to motor reaction, the cervix of the uterus is profoundly constricted and fixed, and the emotions preceding and incident to menstruation are temporarily incapable of producing relaxation.

Temporary dysmenorrhea sometimes occurs from the constrictions incident to shock, but in a very large majority of cases, it is but the reactive effect of irritation from abnormal sex orifices.

It will be seen that for palliation, the thing paramountly desired is dilation of the cervix, and when that is accomplished dysmenorrhea ceases for the time. The solution of the problem in both amenorrhea and dysmenorrhea, is the correction of the anomalous sex orifices.

PROLAPSUS OF UTERUS

Prolapsus of the uterus covers a wide range of difficulties not all of which may seem to come under that title; the term prolapsus signifies the sinking down of a viscus below its normal position.

Distinctively speaking, there is prolapsus of the uterus only when there is distention not only of its ligaments, but a relative dilation or distention of viscera, pressing it feetward and forcing the cervix into the vagina, which situation is brought about by occlusion of the nerves that ramify in the pelvis, which occlusion has existed sufficiently long for the tissue condition to become chronic.

The usual and ordinary prolapsus of the uterus, however, is that which comes about as the result of dis-

tortions of the pelvic girdle, particularly, in the sacro-iliac articulations, as a result of which either the whole sacrum is ventral, or is base ventral, thus carrying the uterus ventrally, and in the last instance ventro-feetwardly.

Of course, the same result as that last mentioned may occur as a result of the crests of the innominates being distorted ventrally, carrying with them the base of the sacrum, for this lessens the pelvic capacity from behind.

It is well known that these distortions, or those analogous to them, are frequent in the human organism; but it must be known that prolapsus of any considerable gravity occurs only in a very small number of these cases, for under usual conditions there is a remarkable power of accommodation in these tissues.

It is where the orificial anomalies, discussed in this chapter, are pronounced that the concomitant of lumbar and pelvic distortions described, cause the result to become profoundly adverse. In such conditions there is not only skeletal distortions, affecting the position of the uterus, but there is profound motor reaction to the organ itself, causing its tissues to go through all of the phases of the inflammatory process, and to finally reach the most catarrhal and negative tissue phases.

It is when the uterus has gone through the inflammatory and catarrhal processes, so that its tissues have become distended, flabby and non-resistive, and its ligaments have also undergone distension, that prolapsus is really and actually presented in all of its aggravating and distressing phases.

Without going into any greater detail than what has

been stated it will be seen that recovery from such situations can only be expected where the anomalous orifices, and the lumbar and pelvic distortions are corrected. In grave and chronic conditions, it must be remembered that this will require much time and very careful attention.

To secure the conditions last mentioned, the woman should be taken off her feet for all the way from four to twelve weeks, during which time she should receive daily and careful application of the principles of Chiropractic, and undergo proper and sufficient exercise of all parts of the body, directed to the strengthening of her muscles, and peculiarly those of the lumbar and pelvic region.

A common sense glance at the situation is sufficient to make it perfectly clear that no hope may be entertained along the surgical line, of shortening the ligaments of the uterus, and such folderol. Not a single case that has been thus operated has ever reached a successful result, and since the method is not anatomic, physiologic nor common sense, it should be wholly abandoned.

FLEXIONS

Flexions of the uterus present another of the bugaboos of the therapeutic profession. Really, as a matter of fact, there are no such things as flexions of the uterus aside from its prolapsus.

The therapeutic world designate what they call anterior, posterior, and lateral flexions of the uterus. As a matter of fact, in the sense stated these do not exist. It is true that the tissues of one side of the uterus may

become chronically relaxed and flaccid, while those of the opposite side remain hypertonicised. In such a situation the uterus will be bent upon itself; but it will be seen that upon the whole the situation amounts to prolapsus instead of flexion.

At this point the student is requested to recall the fact that ninety per cent of human beings present the "typical distortion" which is carefully detailed in the first volume of this work. As a result, in fully seventy per cent of women the mesial plane of the cervix of the uterus is to the right of the mesial plane of the body, while the mesial plane of the fundus is to the left of the mesial plane of the body, and since, in more than fifty per cent of cases the base of the sacrum is ventral to the place it should occupy, the fundus and body of the uterus are projected obliquely ventral as well as to the left.

In the situation just detailed, the therapeutic diagnostician is prone to reach one of two conclusions: either that there is right flexion of the cervix; or left flexion of the uterus. Neither of which in a majority of instances is correct, the fact being that because of the pelvic distortion, the uterus occupies an oblique position.

The normal relationship of the uterus, it will be recalled, is to lie in touch with the ventral wall of the rectum by its dorsal aspect, and in touch with the dorsal surface of the bladder by its ventral aspect, and, to move dorsally and ventrally to accommodate the functions of both the bladder and rectum. Therefore, in the event that the base of the sacrum is ventral, the rectum is forced ventrally, and the uterus is pressed

down upon the bladder, and because of this situation, which he does not understand, the surgeon reaches the diagnosis of anterior flexion of the uterus.

If, however, the apex of the sacrum is ventral, while the base is dorsal, the cervix of the uterus will be raised up against the neck of the bladder, while the fundus and body will lean back against the rectum, and the therapeutist will diagnose, retroflexion of the uterus.

It will be seen that both of the situations described in the last two paragraphs are the tissue attitudes that are enforced by the relative osseous structures, and that it is wholly incorrect to make any diagnosis of them as separate from those controlling structures.

Of course, incident to these suggestions, under the irritation from orificial conditions, by the process of motor reaction, the uterus may undergo all of the inflammatory and catarrhal processes, so that it becomes flaccid and bends either forward or backward in its prolapsus; but it will be readily seen that such conditions should not be discussed under flexions, but under prolapsus.

As a result of the typical distortion already referred to, it is very usual, in fact almost regular for the cervix of the uterus and the immediate portion of the body thereof, to be adhered to the right side, and this is especially true after thirty years of age, in unmarried women, and married women who have borne no children.

Adhesions of the cervix and immediate portions of the body of the uterus to the right side should not be reduced by a laparotomy, as has long been the surgical method, but in such cases the proper orificial correction should be made, and the woman have such additional

care as is indicated, by the application of the principles of Chiropractic, accompanied by direct digital release of the cervix, accomplished per vagina. At the incipiency, this method of correction is somewhat painful, but it very quickly accomplishes the desired result, and without surgical interference.

CHAPTER XLIII

PROCREATION ABNORMALITY

Impotence—Sterility—Barrenness—Miscarriage —Abortion

Any change in the structure of a procreative organ from the physiologic, brings it within the scope of the present discussion.

However, thought is to be more particularly directed in this chapter to a few, specific phases. A few general statements, however, as prefatory to the presentation of those subjects will be of some aid to the student.

Directing the thought to the male; incompetency to procreate may occur by reason of an anomalously small or large penis. The condition being so extravagant in either case as to render the act of copulation an impossibility.

It is rarely that the penis is presented so anomalously as to render copulation an impossibility. These matters are not made prominent and, except in professional circles, are kept secret.

The female sometimes presents the anomalous situation of no vaginal orifice capable of sex penetration; the vagina being only a small tube.

In other cases the vagina is presented, but there is no orifice or external os in the uterus, which, of course, prevents procreation, and renders the woman incompetent from that standpoint.

Anomalous presentations of the sex parts of woman

are multitudinous, and space does not admit of a description of them here, many of them incapacitate for procreation.

It has already been stated in the chapter on " Orificial Abnormality" that anomalous labia minora; and a hooded clitoris, one which is squeezed, or to which the foreskin is adhered, causes much abnormality of multitudinous phases. But in that connection nothing was said with regard to the influences of such conditions upon procreation.

Frequently, because of the conditions stated in the last paragraph, the woman is rendered wholly incompetent to enter into copulative relation in such way as to result in procreation, but on account of those anomalous conditions, remains unfruitful for life.

IMPOTENCE

The actual significance of the term impotence means lack of power, and, of course, the thought in connection with the sex apparatus is referred to the condition of lack of power to perform the act of copulation.

In the sense just stated, the thought of impotence is confined wholly to the male, and is usually restricted to the thought of incapacity to secure an erection of such rigidity as to enable the male to enter the penis into the vagina of the female. This conception is wholly erroneous.

The male is impotent if for any reason he is incapable of entering completely into sex commerce. That is to say, when he is not able to secure an erection and enter the penis into the vagina, and to maintain such erection thereafter until he has reached the climax of an orgasm and emitted semen.

There are many deviations from the capacity expressed in the last paragraph. In some cases the male has capacity to secure an erection and enter the penis into the vagina, but immediately loses the erection, and can go no further in the act of copulation. In other cases erection occurs, but before entrance into the vagina can be secured the seminal discharge takes place, followed by flaccidity of the organ, and copulation is aborted.

In some cases, although there is sufficient virility, and erection is complete and enduring, entrance into the vagina is rendered impossible by anomalous construction of the organ, whereby it is bent upon itself so that the greater the erection, the less the possibility of entrance.

There are too many anomalous structures to permit of individual discussion here, and the subject must be passed with the statement that no matter what the abnormality may be, the male is impotent unless he can perform the act of copulation in all of its parts.

Therapists have not generally conceived that the woman may be impotent; but the same rule laid down as to the male applies equally to the woman.

A woman is impotent, if, because of anomalous construction of the vagina or uterus she is incapable of entering fully into the sex act. That is to say, if she has not a vagina capable of entrance by the penis of the male, and a uterus in condition to function in copulation in connection therewith.

In order that the woman shall have the capacity to accomplish copulation as outlined in the preceding paragraph she must possess a vagina sufficiently large for the entrance of the penis, the walls of which must

be possessed of erectile capacity. There must be a free fornix presenting the cervix of the uterus, through which the tube is unobstructed, and she must be capable of entering into an orgasm, resulting in the projection of follicular fluid into the vagina.

Many errors with regard to potency of the female have been indulged because of the fact that if the woman presents a vagina capable of entrance by the penis of the male, she can apparently enter into copulation without actually being able to do so. There is quite a large percentage of women capable of such intercourse, who are, nevertheless, wholly impotent.

The rule laid down as to the male, fully applies as to the female, and in order that a woman shall not be impotent she must present a sex apparatus capable of meeting in function every necessary phase of copulation possessed by the male. That is the vagina must admit of entrance of the erect penis. It must meet the erection with erection. She must be capable of entering into an orgasm in connection with which follicular fluid is projected from the ampula of the Fallopian tubes, through the uterus into the vagina. Any deviation in ability from this rule renders the woman impotent.

STERILITY

The discussion here is definitely directed to the seminal fluid of the male, and to the follicular fluid of the female, and in either of these fluids, failure to contain the elements necessary to produce offspring, amounts to sterility.

If, in the seminal fluid of the male there are no spermatazoa capable of impregnating the ova, the male

is said to be sterile, regardless of his capacity to ejaculate semen as a result of orgasm.

It will be seen that the rule stated under the preceding sub-title, that if the semen of the male is sterile, that notwithstanding his ability to perform copulation to the ejaculation of semen, nevertheless because of his sterility he is impotent.

If the follicular fluid of the female does not contain ova capable of impregnation she is sterile, and incapable of conception. It frequently occurs that a woman can enter into all of the apparent phases of copulation, and at the orgasm project follicular fluid from the uterus into the vagina, but she is, nevertheless sterile and impotent, because such fluid contains no ova, or if so none capable of impregnation.

BARRENNESS

Barrenness, of course, applies only to the female. It may be seen at a glance that a woman may be barren for a multitude of reasons. She may be barren because of anomalously formed sex organs of such a nature as to prevent copulation. She may also be barren on account of an anomalous prepuce or labia minora which have caused her sex emotion to be wholly perverted, so that she is incapable of entering into procreative relation.

Women laboring under the defects indicated in the last paragraph are sometimes able to copulate sufficiently to permit the entrance of the penis into the vagina, thus partly gratifying the male, and yet not be able to enter into complete copulative relation; neither presenting an orgasm, nor the discharge of follicular fluid.

In some cases, because of the perverted emotion

incident to the sex anomalies referred to, the woman loses the capacity to present ova capable of impregnation in which event she is barren.

As a result of certain traumatic injuries, or long periods of tissue degeneracy under abnormal function, women sometimes lose the capacity to present ova capable of being impregnated. This sometimes occurs also as incident to mal-position of the uterus in its relation with the vagina, so that ova, while produced are prevented from coming into relation with the semen. Any of the phases so far described, while they constitute barrenness, also constitute impotency.

There is one more phase that should be referred to, which renders the woman barren, and that is the failure of development of the uterus from its infantile size, and, as has already been referred to, it is sometimes presented without an opening leading into the vagina.

The tissues of the uterus are frequently so abnormal, flaccid, catarrhal, and depleted, that, although ova are produced and transmitted to the vagina, and are impregnated and ascend into the uterus, the condition of the walls prevents adhesion, and therefore, embedding, and, of course, the process of impregnation is aborted.

MISCARRIAGE

Miscarriage is the name given to the expulsion of the embryo or fetus before "term time;" or in other words, before the normal ending of the period of gestation.

Miscarriage occurs in many ways, but it is always primarily the result of tissue abnormality of the uterus. It may be, and usually is, the result from a wide range of the tissue accessory to gestation.

If an ovum should be impregnated, and migrate into the uterus, strike its wall, and enter into the process of imbedment, but the uterine wall should be so catarrhal and flaccid, that the bed would not hold, and after a time the impregnated ovum or embryo should loosen from the wall, miscarriage has occurred.

Such a result as that just described would be a miscarriage if it occurred at any time during the period of gestation, and before term time.

Miscarriages many times occur between the seventh and eighth months of gestation, presenting a living child. These are called premature births; but they are, nevertheless, miscarriages.

The declaration in the preceding paragraph simply means that if, without wrongful interference, a child is born before the termination of the full period of gestation, the result is a miscarriage, for a woman should be capable of carrying her child until the termination of the full period of gestation.

ABORTION

Ordinarily, and in general use, there is much confusion between miscarriage and abortion. They are wholly dissimilar terms, and should never be confused in their use. Miscarriage refers to an expulsion of the fetus before "term time," but without wrongful interference. Abortion is the result of wrongful interference. Abortion occurs where, because of wrongful interference the impregnated ovum, embryo or fetus is caused to be released from its bed and from the uterine wall, and to be cast off and out of the uterus.

Abortion consists in stopping the period of gestation

by the purposeful administration of abnormal measures, so that the zygote, embryo or fetus is delivered before term.

Abortions are usually produced by the administration of " high power" drugs, which produce such relaxation of the uterine wall as to cause premature delivery. They may be, and frequently are, produced by the intervention of instrumentation by which means the same result is reached.

Abortion by either of the means indicated in the preceding paragraph is a very dangerous procedure, as to its immediate effects, and very frequently results in the death of the woman, and if it does not, it is very seldom, after undergoing abortion that the woman ever wholly recovers from the shock and resumes normal condition.

Before submitting to abortion each woman should know that no matter how early in the period of conception the abortion is performed, that it removes from her body, and kills a human being, and that it is very questionable whether the act can ever be justified.

There are three things in connection with abortion that are of such transcending value that all persons should be caused to hesitate: first, there is the endangering of the life of the woman; second, the probability that she will never recover although she lives; third, there is the destruction of a human being, which, although embryonic, may be and probably is as important, and has as much right to life as any other human being.

All phases of impotency, sterility, barrenness, and tendency to miscarriage; the result of tissue degeneracy

incident to occlusion of nerve stimulus, may be wholly recovered by the application of the principles of Chiropractic, unless the degeneracy has gone too far.

One of the most astonishing results of the application of the principles of Chiropractic have been observed in the recovery of men to sex capacity who for years lacked that power.

Women who have never had the capacity to undergo all of the phases of normal copulation have been completely restored, and given virility in every phase of sex relation, even to the extent of the capacity to become impregnated and bear children.

Men who have been declared sterile, whose semen contained no virile spermatazoa, have by the application of the principles of Chiropractic been restored to the production of virile spermatazoa, and have had the satisfaction of producing normal offspring.

Women who have been barren, because of some adverse tissue condition of the sex apparatus, have been sufficiently returned to the normal to enter into all of the relations of copulation; to undergo impregnation, and to deliver a normal child at full term.

Women who have had the tissue habit of miscarriage for years; having cast off several conceptions at three or four months, have, by the application of the principles of Chiropractic been rendered so virile that they have conceived, and have not only carried their child to full term, but have delivered it in a period varying from thirty to forty-five minutes practically without pain.

Where a woman has undergone the terrible ordeal of abortion, there is no surer relief, in her time of danger than the constant and intelligent application of the

principles of Chiropractic. In such emergencies the author has applied the principles of Chiropractic to puerperal fever, following abortion, with the most astonishing and complete results.

Relating to remove occlusion causing impotency, sterility, barrenness and miscarriage is, of course, primarily directed in the female to releasing nerves to the uterus, the ovaries, and to the vagina; and as far as these occur in the male, to the seminal vesicles, testes, prostate gland, and penis. In male and female these are the twelfth thoracic, second lumbar and the fourth and fifth lumbars, and also the ilio-sacral and the sciatic areas—the latter to release the pudic nerve trunks.

CHAPTER XLIV

GENERAL DISCUSSION OF SURGERY

Surgery is generally held to consist of instrumental intervention in the manipulation of any part of the organism for the purpose of alleviation or correction of any injury, deformity, or pathologic condition thereof.

There has been an endeavor on the part of some short-sighted persons to conjure up certain manipulations with the hands and fingers, and to call such work hand and finger surgery. This is entirely aside from a practical conception, and fortunately in this country we have settled that question for all time, by declaring that nothing is surgery except the intervention of instrumentation.

There are, as the definition given herein implies, three kinds of surgery. There is (1) surgery definitely directed to correction of anomalously presented parts. This might with equal propriety be called constructive surgery. There is (2) palliative surgery, which consists in removing pathologic growths and accumulations; and there is (3) destructive surgery which consists in the extirpation or amputation of parts of the organism.

The first character of surgery mentioned is the one which holds out the greatest promise to the human family; that is, the correction of anomalies and congenital presentations.

Within the scope of such surgical procedures lies all of the remarkable possibilities of orthopedic correction;

the correction of distorted features, such as badly shaped ears, noses, and so on.

This phase of surgery is also to be applied, and is peculiarly adapted, to the correction of anomalies and congenital sex orifices, and sex organs, and in connection with this thought, anomalously presented intestinal and other visceral monstrosities.

The author wishes to emphasize the remarkable possibilities of this character of surgery; to encourage investigation and research in this direction, always following and co-incident with the fundamental principles of Chiropractic.

The second character of surgery referred to, that of palliation by the removal of pathologic formations and accumulations is indeed a very valuable department of surgery; but is not so frequently necessary as has been thought by the therapeutic profession and nothing like so necessary as the lay world has been led to believe.

This is the department of surgery through the intervention of which cysts, tumors, cancers, boils, carbuncles, felons, and other pathologic obstructions are removed.

When the organism, or a part of it, has been neglected to the point that such gross phases of pathology have not only been permitted to occur, but have been permitted to reach a marked phase of gravity, there are instances in which this phase of surgery is most friendly to the organism, and is necessary to the maintenance of its animation.

The third character of surgery defined relates to such procedures as the removal of the ovaries, Fallopian tubes, uterus, appendix, segments of the intestines, extirpation of the testes, and includes also the extirpation of many

other parts of the viscera, such as a kidney, the thyroid gland, and so on.

Not much can be said for the phase of surgery pointed out in the last paragraph. It is indeed rare that viscera must be removed, and it must be remembered that a viscus should never be removed until its removal has become so necessary to the animation of the organism as to render it a last emergency.

The other department of this character of surgery, that of amputation, when rightly applied is entitled to our most profound admiration, but this statement must be accepted with the caution that it is very rare indeed that extirpation is necessary, and certainly extirpation should never be accomplished except as a last emergency.

The author wishes to lay down the rule at this point, which should govern all surgical procedures: surgery should never be resorted to except as a last resort in emergency. Of course, the circumstances which indicate an emergency are always to be determined by the sound discretion of the expert who is in attendance upon, or has supervision of the case.

For the purpose of indicating the wide range of surgical emergency, let it be remembered that when either a boil, carbuncle, or a felon has passed its incipient phase, and cannot be removed by releasing occlusion of stimulus to the area, the emergency for surgery has arrived, and the correct handling of the situation is by opening the pathologic accumulation to its depth.

In the matter of the extirpation of an appendix, for instance, an emergency does not occur unless the appendix has become so elongated and distended as to

furnish a leakage from the cecum, or by prolonged irritation it has adhered to relative mesentery, or other structures in such manner as to continually pull and distort. In such conditions, surgical interference may release the adhesions of the appendix, leaving it free to function normally, or in conditions where the appendix has become so distorted and scarred as to be beyond recovery, it should be extirpated.

In the connection just indicated, it must be clearly understood that the surgical emergency has not been reached until the principles of Chiropractic have been definitely and intelligently applied without recovery from the situation. For if recovery of the patient can be accomplished by any other means, surgical intervention is not necessary, and there is no surgical emergency.

In ovarian cysts, as another illustration, where the cyst has become so large that its weight and abdominal intrapressure is so great that the irritation and motor reaction caused thereby cannot be overcome or released by the application of the principles of Chiropractic, the surgical emergency has arrived, and extirpation of the cyst, together with the disintegrated ovary, has become a surgical necessity.

The same principles hold good all through the viscera. The important proposition always presented in such situations is to carefully watch and determine when the surgical emergency has arisen, and to act rapidly, and intelligently, and accurately when the emergency has occurred.

In the matter of amputation, it is not so difficult to determine when the surgical emergency has arrived, for the parts being external or appendal, a very much more

extended and careful examination of them may be made by ordinary means.

The rule in such cases is found in the following: When the principles of Chiropractic have been faithfully applied to the part for several days, perhaps a week or two, and instead of getting better, it is getting worse, and to such an extent as to threaten animation, then the surgical emergency has occurred, and amputation should be correctly and quickly performed.

However, if, under the careful application of the principles of Chiropractic the pathologic situation has been checked, that is to say, has not gotten any worse, although it cannot be determined to be any better, there is no surgical emergency, and no surgical intervention should be permitted.

In such cases the principles of Chiropractic should be faithfully applied, until a change takes place for the better, and in such cases it will be soon enough for surgery, after prolonged application of the principles of Chiropractic, if it should be ascertained that notwithstanding, pathology is nevertheless gaining.

The trouble about amputations is the misconception of the human family with regard thereto. Amputations for the purpose of relief from pathologic conditions are failures in a very large majority of cases. Where amputations have been made to remove pathology, it is usually found that another amputation must be made because of the same phase of pathology occurring in the stump or parts after amputation.

The situation indicated in the last paragraph finds a tragic illustration in the case of Dr. Clayton of Melbourne, Australia, who suffered a slight injury to

his neck and shoulder by a fall, who finally underwent forty-two major operations, having the arm amputated to the glenoid cavity, and the laminae of the vertebrae removed from the fourth cervical to the fourth thoracic on the left side, thus destroying the beauty and usefulness of a majestic and highly educated man, who stood six feet and four inches in height. After all of these amputations he got the only relief he had obtained by the application of the principles of Chiropractic. If Chiropractic had been applied in the first place, no amputation or surgical interference of any kind would have been necessary.

It is quite unnecessary to add that necessary surgery includes the reduction of fractures, the sewing up and attention to cuts, lacerations, incisions and the like, and the lancing of boils, carbuncles, and felons in the emergency phase. The extirpation of viscera that can not longer remain without endangering animation of the organism. The removal of pathologic accumulations of such gravity as to produce irritation beyond the possibility of reduction by the release of nerve occlusion; and amputation when a condition indicating a surgical emergency has been reached.

The foregoing affirmative statement must be accepted with the caution, that surgery of all kinds must be avoided, except where the symptoms taken with the general experience of mankind, indicate a certainty of betterment in the given case by its performance.

Exploratory incisions have become so numerous as to be a laughing stock to intelligent men and women. Surgeons have resorted to this method just as a matter of satisfying a vain curiosity. This should never occur.

However, exploratory incisions are justifiable in many instances, for the purpose of actually investigating the details of pathology, to see if intervention of surgery, either by way of removing pathologic accumulations, anomalous situations, or other adverse conditions may be profitably employed.

For example, the author has known of patients suffering for many years from a continual pain in the region of the solar plexus, one case in particular, a young man who fifteen years before had been kicked by a horse and from a few weeks afterward had suffered continual pain in the region of the solar plexus. Such a condition could easily have been brought about by scar tissue having formed which, by constriction produced pressure upon the splanchnic ganglia; the fact could have been ascertained by an exploratory incision, and if that situation was found, the adhesions could have been easily released.

In connection with exploratory incisions the author wishes it understood that, while he would permit a wide latitude of legitimate investigation, yet he desires to impress upon the student the necessity for the most profound caution in such matters, for it is always a tragedy to open the abdomen, or any cavity of the body, surgically for any purpose.

Educational surgery should never be engaged in under any circumstances. What is meant by "educational surgery," is exploratory incisions made into the cavity of the body, or into the tissues of the body anywhere, simply for dissection purposes, that is to demonstrate a fact, when no surgical emergency or necessity exists.

In modern surgery a very great deal of educational exploration is being constantly performed, and it should by all means be stopped. It is dangerous, and it is the constitutional privilege of a human being to keep his body inviolate, and this should constantly be remembered.

The author wishes it distinctly understood, however, that when a surgical emergency exists, and it is necessary to perform surgery of any kind, prudery and sensitiveness should not be permitted to intervene, and prevent using such emergency to its greatest educational value.

Indeed, all necessary surgery should be performed in well established amphitheatres, to which all students of the body able to intelligently understand what is being done should be admitted, including not only surgeons, doctors and other professional men, but educated laymen as well.

It is, of course, a tragedy when surgery must be performed, but it is a still greater tragedy that necessary surgery be performed in private, and its educational advantage thus wholly lost.

There is no better way to learn the exact tissue condition, and functional conduct of the body than by a careful observation of it during surgical operations. Nothing of much importance can be learned by the dissection of cadavers, but facts of the greatest value may be learned by a careful observance of operations upon the animate body, and such opportunities should not be wasted.

As an estimate, the application of the principles of Chiropractic to the human body eliminates the necessity of from 80 to 90 per cent of surgery which, under therapy

has been deemed necessary. It is the belief of the author, based upon an experience covering many hundreds of operations under his immediate supervision, that after a time it will be possible to reduce necessary surgery ninety per cent from what was formerly considered necessary.

When that time comes there will be only a few surgeons, but those who are, will be experts of the very highest type, because of the excellence required, which is as it should be.

A still further classification of surgery, the reason for which does not clearly appear, divides it into what is called major surgery; and minor surgery.

What has been said in this chapter may, and frequently does, apply to both of these characters of surgery, but in a general way this chapter has been devoted to a discussion of major surgery. The succeeding chapter will deal largely with so-called minor surgery.

CHAPTER XLV

FIRST AID

Emergency—Cuts—Punctures—Gunshot Wounds—Lacerations—Dislocations—Fractures—Hemorrhage—Burns—Fainting—Drowning—Asphyxiation—Anesthesia—Seizures—Heat Prostration

The department of surgery now to be discussed is called minor surgery. In an attempt to distinguish it from the definite and comprehensive procedures detailed in the last chapter, the student must remember that there really is no line of demarcation between minor and major surgery.

Of course, when the subject is considered as to its antipodal aspects there is a wide difference, but when the line which should divide the one from the other is sought for, it cannot be found.

To illustrate the conclusion stated in the last paragraph, all operations which come under the class called laparotomy, that is, incisions into the splanchnic cavity, are clearly major surgery, as is also the extirpation of viscera; but certain amputations, even in appendal parts are also classified as major operations, yet amputation of torn and lacerated pieces of flesh, in order to properly close a wound is called minor surgery, and there is nothing to distinguish between these.

The student will be quite well advised, however, if he retains the conception that amputations and extirpations are major surgery, and that practically all

operations not coming within this class are minor surgery, and, while these definitions are not very satisfactory, they will in a general way answer all purposes.

The phases to be discussed in this chapter clearly comprehend both major and minor surgery, but the procedures to be outlined are always confined to a given set of circumstances, and do not comprehend the doctor having been called to the case with deliberation.

EMERGENCY

A surgical emergency exists when the circumstances surrounding an injury render it peculiarly expedient that the patient shall have corrective or preventative attention without delay.

This emergency may occur in connection with the most severe wounds, or it may be in connection with the culminating phases of pathologic tissue conditions and procedures, or it may be in connection with peculiar interferences with physiologic action.

The prime idea in all emergency or first aid situations is that the doctor is the first to arrive, or be incidentally called to the sufferer, not to do the regular and permanent things that should be done for the patient, but for the purpose of administering such temporary help as is immediately indicated, until the surgeon or physician, who is to render permanent assistance, has reached the case.

CUTS

Cuts are wounds that have been made by sharp instruments. They are, therefore, wounds that have considerable length and depth with very little width.

In small cuts, first aid really comprehends the complete attention the wound requires, which is primarily cleansing it by the use of its own blood if possible, but, if necessary, cleansing it with water, or if there is debris it may require the use of mild antiseptics. In any event the wound must be cleansed, its edges properly related, and they should be held by surgical adhesive bandage, with opportunity for drainage, if there is any apparent necessity such as would exist if antiseptics had been used to cleanse the wound.

If the cut is deep, and arteries have been severed, the emergency procedure would require their ligation, but if the one administering first aid has no instruments for that purpose, the arterial flow to the cut, if the part is appendal can usually be stopped by tying a hard knot in a bandage, and putting it around the part so that the knot is over the arteries leading to the wound, and then twisting the bandage until it is very tight.

If the arteries are very small, bleeding can be stopped by sprinkling the wound with clean dust. That is to say, dry earth powdered, by filling the wound full of granulated sugar, or mytheline blue. If the wound is deep and the arteries cut are large, in addition to ligation as described, it will sometimes be advisable to use some of the emergency substances mentioned to assist in stopping the flow of blood.

In emergency procedures, it is not generally safe to use astringents nor stiptics, for if an astringent or stiptic fails to work as such, it then operates as a dilator and would tend to increase bleeding rather than stop it.

PUNCTURES

Wounds made by narrow, sharp-pointed instruments, such as daggers, stilettos, neddles, bodkins and the like come under this classification.

First aid attention to this character of wounds comes most nearly under the head of cuts, and still bears some relation to gunshot wounds.

Generally, in wounds caused by puncture, all that is required under first aid is to stop bleeding, but sometimes the wound may be in such a vital part of the body that it will be necessary to open the puncture in order that deep arteries may have attention to check bleeding. In such a case a sufficiently wide incision may be made at the mouth of the wound that the arteries can be reached, when bleeding may be stopped by holding an artery with the fingers, by the use of a hemostat, or the artery can be sewn through with catgut, which may be thrown around it in a loop and drawn tight.

GUNSHOT WOUNDS

Generally speaking, first aid attention to gunshot wounds requires resuscitation of the patient, and such measures as placing the body in such position as to most perfectly protect the wound, etc. Ordinarily first aid does not require probing for shot or bullets that may be lodged in the flesh. Of course, first aid requires stopping the flow of blood if there is considerable wasting.

It sometimes happens, however, in this character of wounds, as in punctures, that deep arteries are severed, and the patient is bleeding internally from arteries that cannot be reached. In such cases the same procedure should be adopted as that already given for punctures.

LACERATIONS

Lacerations come specifically under the same first aid procedure as cuts, and nothing further need be said in this connection, except it might be well to give some suggestions as to the proper method of closing the wound.

The edges of lacerations are always rough, for the thought of laceration means that the tissues have been torn asunder. It sometimes happens, therefore, that there are mangled portions of flesh, which cannot be made to fit in the wound, and are so nearly severed as to render the maintenance of their animation very doubtful, in which event such portions should be amputated and the edges of the wound should be smoothed up so that they will fit nicely together, after which the wound should be cared for by the same procedure suggested as to cuts. However, using exceeding care to secure drainage.

To secure drainage in the closure of a lacerated wound, a little surgical gauze should be put into the lowest part of the laceration, so that it reaches the deepest part of the wound, and extends out from under the bandage or covering of the wound, in order that the liquid from the bruised structure which must disintegrate, may find a pathway of easy escape, and will not be exosmosed from the wound into the adjacent tissue. This precaution will frequently prevent what surgeons call sepsis.

DISLOCATIONS

First aid to a dislocation usually only includes putting the injured person in as easy a position as possible, and the dislocated part in the best situation to cause the

least pain or injury. Many times this requires bandaging the dislocation, and sometimes splinting it, so that it will be held still and firmly. It is sometimes advisable to bandage the part on the side next to the body, so tightly as to inhibit the nerves, thus lessening pain until the injury can have proper attention.

What has just been said is based upon the thought of dislocation of large joints. Sometimes the dislocation is sufficiently small, such for instance as the terminal joints of the fingers where first aid includes the correct reduction of the dislocation.

FRACTURES

The first attention to a fracture is precisely that indicated in a dislocation. That is to say, to put the injured person in a position which will bring him the greatest ease under the circumstances, and to place the fractured part in such position as to suffer the least injury, and give the least pain. This sometimes requires temporary splinting and bandaging, without any attempt to reduce the fracture.

In addition to what has been stated in compound fractures, it is usually advisable to cleanse the protruding bones, and incidental wounds before attempting any temporary splinting or bandaging.

In compound fractures, sometimes arteries and veins are torn so that there is much bleeding. In such an event the waste of blood must be stopped. For that purpose hemostats may be resorted to, or the tourniquet.

HEMORRHAGE

The character of emergency here referred to, is particularly directed to incidents of pathology, where

sudden bleeding occurs as a result of the disintegration of the walls of the arteries, and veins. Or where regular procedures of some kind have accidentally resulted in bleeding.

The hemorrhages under discussion are those from the lungs in tuberculosis, from the esophagus or stomach in grave gastric conditions. Also from the rectum incident to great tissue debility, and also includes those hemorrhages that sometimes occur, incident or subsequent to delivery of the fetal membranes following childbirth, when the uterus fails to undergo normal contraction.

Generally, all that can be done for the hemorrhages here indicated, as a matter of first aid, is to place the subjects of them in such position as to receive the benefit of gravitation. If the bleeding be from the esophagus or stomach, the administration of mytheline blue would be indicated and justified. This may be administered in pretty large amounts, as it does not injure tissue. Of course, if the bleeding is from the lungs, the only thing that can be done is to put the patient in as good position as possible, and keep him as quiet as may be.

If the patient is bleeding from the rectum, the nerves to the rectum should at once be released by proper relating, followed by dilation of the rectum either with a rectal speculum, or with the fingers. If these means do not succeed the rectum might be pretty well filled with mytheline blue. If there is nothing else convenient a handful of clean, powdered, dry dust of the earth will usually be very efficacious.

In uterine hemorrhage, following delivery, the proper

emergency procedure is to release the twelfth thoracic and second lumbar areas, incidentally the lumbo-sacral area, and the sacro-sciatic, after which the patient should be placed upon a bed or other surface, raising the foot of the bed, or whatever it is, a foot or a foot and a half higher than the head, so as to markedly raise the pelvis above the rest of the trunk, thus giving the situation relief by gravitation.

If the procedures outlined do not serve to wholly stop the hemorrhage, the two front fingers should be placed per vagina against the cervix while the fundus and body of the uterus is grasped with the other hand to secure contraction. This, however, will usually not be necessary, since the very most aggravated cases have been stopped by the two procedures named in the preceding paragraph.

BURNS

Burns are wounds somewhat analogous to lacerations, but are of a still graver type, and in a majority of cases first aid attention to them must be permanent attention.

If the burn has not been sufficiently grave to remove the skin it will be sufficient to moisten the area several times with plain kerosene at intervals of say ten or fifteen minutes, and after about an hour wrap the part with a light bandage, covering that with oiled silk, so as to exclude the air, which will be all that is necessary.

In cases where the skin is destroyed by the burn, the correct emergency procedure is to take a half and half mixture of lime water, and raw linseed oil, and make a copious application of it to the whole area, which should then be covered with a very fine gauze, upon

which should be placed layers of medicated cotton about two or three deep, which should be thoroughly saturated with the lime water and oil mixture, leaving opportunity to continually moisten this cotton with the solution; when the whole should be covered with yellow, oiled silk, in such way as to completely exclude light and air. When this has been properly done, no further attention need be given the part for forty-eight hours, except that the cotton must be kept wet with the mixture described.

Of course, the patient must be put in the very best position for his ease and comfort, and should have no solid food, but should have a copious administration of good water. After forty-eight hours, the burned area should be uncovered, and redressed as before.

There are two things which make burns very dangerous: (1) where the burn is very deep, near a vital area, and (2) where a very large area of skin is destroyed. But these propositions are referred definitely to the permanent care of burns, and not to the emergency administration.

Upon being called in emergency to a burn, it is important to get to the site of the injury quickly, and to free the wound from clothing. In such cases the value of clothing, etc., should be entirely overlooked. Free the wound at once with the least pain and injury to the person possible, and then proceed as already instructed.

FAINTING

Not much need be said as to first aid in fainting, which consists primarily in getting the patient a free opportunity for air, and for respiration, which includes

opening the clothing, and loosening belts, corsets, etc., and in accomplishing this the important thing to remember is to get the body free as quickly as possible.

The subject of a fainting or swooning condition should be straightened out, and laid upon the venter, with the head several inches below the feet, with the head turned upon the side not too sharply, and placed in position to lean ventrally, so that all of the air passages are free, and the nerves of the neck released as much as possible. Of course, incident to placing the patient in this position, relating should be applied over the third and seventh thoracic areas, with longitudinal traction of the cervical region.

Nearly always this relating procedure will result in overcoming the faint or swoon before the patient may be placed in the position named, but if not, then the patient should be allowed to rest for a short time in the position indicated. It is not usually necessary to administer any water, but nearly always a drink of cold water at the time of the incipient return to consciousness aids very much, and sometimes sprinkling cold water upon the face and neck aids in a rapid return to consciousness.

DROWNING

This is a condition which approaches auto-asphyxiation. That is to say, the person has been submerged in water, or other liquid, so that inspiration of the atmosphere has been rendered impossible, and what atmosphere was in the respiratory tract has escaped, so that there is a continual and progressive accumulation of carbon-dioxide in the atria of the lungs, or those spaces have been entirely occupied by water.

It will be seen, therefore, that the very first necessity is to remove the water from the lungs. For this purpose the patient should be placed over a barrel or log, or the body of a person standing upon his hands and knees, with the venter of the drowning person down, and the head and torso hanging from the support. As incident to placing the patient in this position, relating should be applied at the fourth and seventh and twelfth thoracic areas, accompanied by longitudinal traction of the cervical region.

While the patient hangs in the position indicated, the administrator of first aid puts the hands around the body, underneath the costal arch, and forces the body into the movement that would be accomplished in ordinary respiration; incidentally emptying the water from the air passages and esophagus. After the water has been quite thoroughly removed, another relating should be performed, and the patient placed upon the dorsum with the headward end of the body lower than the pelvis, and what is called artificial respiration should be again performed.

Immediately upon being called to such a case the first aid operator should send by the quickest means for a pulmotor, which should be freely used if respiration does not begin following the removal of the water. However, a pulmotor should not be used to the exclusion of the principles of Chiropractic, and should be alternated frequently by relating to release the nerves and set up normal respiration and heart action.

First aid to the drowning constitutes complete attention, for so soon as function recommences, usually no further attention to the case is necessary.

ASPHYXIATION

This condition is really drowning by submergence in gas instead of water, and results when a gas, composed of a chemical formula which does not contain sufficient oxygen, occupies the atria to the exclusion of oxygen.

The person is threatened with inanimation as a result of toxinization by gas, and the thing desired is to remove the noxious gas permitting oxygen to take its place.

The first thing in such a case is to take the person into free air, and to perform relating directed to opening the larynx, trachea, and tubes to the atria. The work for this purpose will be longitudinal traction, and release at the fourth and seventh thoracic areas. If, incident to the situation, diaphragmatic fixation exists, application at the twelfth thoracic area will be also necessary.

The relating indicated should be applied as soon as the patient is taken into the fresh air, and should be followed by so-called artificial respiration, the same as that in drowning, except the patient should be placed in a position on the back and almost sitting, remembering that gases of the character involved tend to rise, and for that reason it would not do to put the patient in a horizontal position, or with the head down.

At this phase of the situation the pulmotor should be obtained as quickly as possible and used, but relating should be performed at ten or fifteen minute intervals until respiration and heart action is practically normal, and until consciousness is restored.

ANESTHESIA

The condition here is an intoxication superinduced by volatile substances diffused in air, and forced into the

inspiratory tract, the substances most commonly used being chloroform and ether.

In such administration an excess of these gases over oxygen is used, and the result accomplished is insensibility not only to pain, but to everything, and a general lowering of tissue sense. As a result of the general lowering of tissue sense in connection with the administration of anesthetics, it sometimes happens that the muscles of respiration become fixed so that neither inspiration nor expiration occurs; or that the muscles of the heart become fixed, so that the systoles and diastoles cease.

It will be observed that in either of the conditions just mentioned, the paramount first aid is to incidentally break the fixation. The surest means of accomplishing this result is to turn the patient upon the venter, with about a six inch roll under the pelvis, which may be composed of a comforter, a block of wood, a large dictionary, a box or anything that is handy, and delivering sudden, sharp and very forceful thrusts at the fourth, seventh and twelfth thoracic areas. Usually this will serve to break the muscular fixation interfering with respiration and heart action, and will sufficiently release the diaphragm that these functions will continue and become normal.

If the first application of the thrusts described does not bring an immediate result, longitudinal traction should be performed, together with definite release of nerves to the brachial plexus, which will free the nerves from the eighth cervical and first thoracic trunks, that make up the larger portion of the inferior cardiac trunks.

The author has been present under circumstances of the kind just described, and has never known the means

suggested to fail, and he has applied them many times, frequently to the astonishment of the anesthetist and surgeon connected with the operation in progress.

Sometimes anesthesia results in a gorged gall bladder emptying suddenly into the intestine, under such relaxed conditions the pylorus of the stomach is open and bile gurgitates into that organ, and by active titillation of multitudinous nerves therein, brings on a cumulative, biliary anesthesia—cumulative, in that it joins forces with the anesthetic already at work.

When the condition described occurs, first aid must be performed quickly. The patient should be quickly turned upon the venter, and forceable, short thrusts applied at the fourth and seventh thoracics, after which the body should be suspended from the table by the thighs, and while one attendant holds the patient in that position, the first aid operator should reach around the patient, with both hands catching the abdomen below the stomach, which should be forced abruptly against the diaphragm, repeating this movement frequently, and with much force, so as to open the cardiac orifice and cause emission of its contents, after which the patient should be placed upon the table, and strong, longitudinal traction applied to the cervical region, then a roll should be placed under the hips and thrusts applied at the fourth, seventh and twelfth thoracic areas, followed by release of the brachial plexus.

If by this time breathing and heart action has not begun, the rectum should be fully dilated, either with the fingers or an instrument, and if it is a woman and dilation of the rectum fails to start respiration and heart action, the vagina should be fully dilated, followed by

another application of the thrusts that have been described.

The author has had occasion to apply the means described herein, and has never found it necessary to go beyond emptying the stomach, and applying the thrusts thereafter to bring about a return to usual conduct.

SEIZURES

First aid in seizures consists primarily in placing the patient in the proper position.

If the seizure results from a congestion in the brain, the patient should be placed upon the venter, with the headward aspect of the body higher than the feetward; but if the seizure is from lack of blood to the head, such as in fainting or swooning, the patient should be placed upon the venter with the headward end of the body lower than the feetward.

Incident to seizures, resulting from congestion in the head, primary release of the fixation of the muscles of the neck is the first aid office, followed by release of nerves to the heart, brain and respiration. If the seizure is of the nature of swooning, then the primary release is at the fourth and twelfth thoracic areas, followed by longitudinal traction.

HEAT PROSTRATION

In this phase of difficulty, first aid attention requires that the person shall be removed to a place where the temperature is not above seventy degrees. The clothing should be removed, and the surface of the body thoroughly frictioned, but before doing any of these things, relating should be performed to release nerves to the

heart, respiratory organs and the brain. This relating should be repeated at ten or fifteen minute intervals until the symptoms indicate the subsidence of the attack.

In some very grave prostrations, it will be necessary to almost continually perform release to the heart, respiratory organs, and brain, which requires freeing the trunks of the brachial plexus and the third thoracic area, for from a half to two or three hours.

In the most difficult case of this character to which the author gave personal attention the thermometer stood at one hundred and seven degrees in the shade, and there was not time to remove the patient to a cooler place, and he found it necessary to continue the release of these areas almost continually for three and one half hours, which terminated in the recovery of the patient. If he had ceased at any time during the first three hours the person would have died at once.

After taking the patient to a place where the temperature is about seventy degrees, and the clothing has been removed, the body should be thoroughly frictioned, and relating frequently applied, between which the patient should be placed upon the venter, with the headward aspect of the body slightly lower than the feetward, and the body should be in such position as to encourage the greatest freedom of respiration and heart action.

After respiration and heart action is fully restored, the attention necessary is complete rest with occasional relatings as suggested.

CHAPTER XLVI

SPECIAL AREA ABNORMALITY

Eye—Ear—Nose—Throat

It is a habit or fad of therapists to designate certain areas as centers of abnormality, and to pretend to the quality of specialists in care of that kind of cases.

It is quite unnecessary to say that there is no reason for selecting any part, area or areas of the body as being peculiarly the subject of disease.

It must, of course, be understood that areas of the body, or organism, which are ramified by nerves from motor reactive centers of the vertebral column, are always primary in failure of resistance.

In a general way the areas just indicated have been pointed out and discussed in this work, beginning with the procreative organs, going next to the anal canal, the cecum, appendix, the sigmoid flexure, third convolution of the jejunum, to the kidneys and suprarenal capsules, the great digestive glands, the stomach, the heart and respiratory centers, the thyroids, the throat, eyes, nose, ears and brain.

It has been explained that the feetward end of the trunk is peculiarly and particularly the center of irritation and, therefore, the area of incipient motor reaction, especially affecting all of the motor reactive centers suggested, but definitely those at the other extremity of the vertebral column, to-wit: the eyes, ears, nose, throat and brain.

Incident to the statement in the last paragraph, it has also been called to the student's attention that the feet, because primarily the weight-bearing parts of the body, are peculiarly centers of somatic irritation and somatic, motor reaction, which affects all of the motor reactive centers suggested, and particularly expends its most adverse influence upon the neck and head, and incidentally, special areas mentioned in the last paragraph.

The student will observe that where there is irritation at the feet and the feetward extremities of the trunk, there is a concomitant motor reaction to all motor reactive centers, which expends its greatest distorting influence upon the neck, head, eyes, ears, nose and throat.

It has been explained in the chapter entitled "Orificial Abnormality," that irritation of the feetward orifices of the body, particularly anomalous sex orifices, is paramount in the production of abnormality in the tissues of the brain, and the special areas to be discussed in this chapter.

Of course, as has been suggested, these phases will be greatly increased by irritation of the terminals of nerves in the feet, and the motor reactive effects therefrom.

Practically all irritated conditions, not superinduced by direct injury to the eyes, ears, nose and throat, are the direct result of irritation from anomalous sex orifices of the body. Further and more complete discussion of this proposition will be found in the chapter on "Orificial Abnormality" herein.

THE EYE

There are several phases of abnormality of the eyes, which consist in their anomalous formations, since they

are quite different from the usual. These are called hypertrophic, myopic, and astigmatic.

Hypertrophic simply means "far sighted," so named from the ability of the victim of this abnormality to see better at long distance than near to. In this phase, the cornea of the eye is so flat that so-called "rays of light" passing into the eyes, do not converge rapidly and therefore, a better focus is obtained of objects at a greater distance.

It will be seen that the paramount symptom of "far sightedness" is the fact or experience of the patient. It will also be understood that this difficulty cannot be removed to any great extent, because children are born with the eyes nearly full grown, and they are so by the time the child is ten years of age.

The application of the principles of Chiropractic from early infancy to full growth of the eyes will sometimes result in complete recovery. In very pronounced cases success cannot be expected, yet the eyes will always be benefited by the application during this time.

Myopic simply means "short sighted." That is to say, the cornea is excessively curved, and, therefore, objects that are near the person can be plainly seen, but very poor focus is obtained of objects that are distant.

It will be seen that the situation under discussion is an anomalous formation of the eyeball, and what was said about recovery in "far sightedness" applies here. In not very pronounced cases taken in early infancy, much can be done by the application of the principles of Chiropractic, but in pronounced cases very little can be accomplished.

Astigmatism exists when the eyeball is anomalously formed so that it presents an almond shape, in which focus must be obtained by muscular control of the pupil, which must be constant in order that convergence of the so-called rays shall occur at the right place in the eyeball.

The muscular exertion which must be constantly put forth to see, by one having astigmatic eyes, has been called eye-strain, by the opticians and ophthalmologists.

Eye-strain is a very injurious phase of conduct, for it is irritation which motor reacts to the cortex of the brain, causing cortical excitation, that results in occlusion affecting the body generally, but particularly those areas of it to which the nerves are occluded by subluxation. Astigmatic eyes are many times incident to imperfect formation of the stomach, and therefore, the irritation from eye-strain very frequently expends its marked effects upon the stomach.

Aside from the anomalous defects of the eye, which have been noted, the phases of abnormality will be found to consist in the same general abnormal conditions which are incident to any other tissues, and result from occlusion of nerve stimulus to the eye, producing congestion, inflammation, inflammatory catarrh, and exuding catarrh. These phases have been so frequently described in this work that they need not be detailed in this connection.

Many phases of abnormality of the conjunctiva, and eye-lids are superinduced by irritation directly applied to the tissues, such for instance as dirt, poison, and other characters of irritants getting into the eyes.

The phases of irritation of the eyes, and their

sequentially adverse processes may be superinduced by exposure to cold, the direct sun's rays, woodland poisons and a multitude of things.

Extraneous irritants may produce many phases of acute inflammation in the external parts of the eyes, and indeed in the deep structures of the eyes, when poisons are transmitted to them from the liquid transportation systems. Such conditions frequently occur as incident to the toxic, eliminating phases of disease, such as so-called small-pox, and other eruptive fevers.

The phases of abnormality of the eyes that result from poisons distributed by the liquid transportation systems, usually fall under the classification of inflammation of the eyes, and of the cornea, ulcers of the cornea, inflammation of the iris, inflammation around the eye-lashes, inflammation of the tear ducts, catarrh of the lacrimal glands, granulated eye lids, glaucoma, cataract, and blindness.

It will be observed that most of the phases mentioned in the preceding paragraph are primarily affirmative in their nature, yet a little closer observation will disclose that each process presents its negative, and that some of them present a remarkable degree of the negative phase in the affirmative process, and because of this fact a further discussion of some of the phases mentioned must be indulged.

Granulation of the lids is the process most frequently referred to as "granulated sore eyes." This is a phase of abnormality that results as incident to chronic, kidney conditions, and never occurs unless there has been a long continued negative conduct of the kidneys, and incident thereto there must be direct occlusion of the

nerves to the eye-lids, which exists when there is subluxation affecting the fourth thoracic nerve trunks, which are so-called stomach and eye nerves.

In granulated lids there is a precipitation of acids, which cannot be eliminated, because of inactivity resulting from occlusion, but enter into a dangerous and degenerative tissue process.

The incipiency of the phase just described is a tendency to inflammation of the eye-lids, which sometimes become so marked as to be called sty. Inflammation of the eye-lids may be so pronounced as to result in inversion, in which condition the mucous lining is so swollen as to turn the lid inside out, rolling it upon itself.

Glaucoma is a phase of abnormality peculiarly referred to the vitreous humor of the eye, and is sequential to the inflammatory phases, in a general way, of the eye-ball, during which processes there has been a precipitation of acids in the vitreous body of the eye, as a result of which there has been marked interference with lymph transmission into and out of that body, that has resulted in retention of solid residues of depuratory substances which should have been eliminated, producing at first a cloudy appearance of the vitreous humor, which is ordinarily called opacity.

The effect of the situation just outlined is to give the impression to the victim of it, looking out upon a clear sky, that it is slightly foggy. This condition increases, if no assistance is given, until there is such a precipitation of lymph and disintegrate tissue residues in the vitreous humor, that transmission of so-called rays of light to the retina is impossible and vision is lost. This

phase of abnormality is frequently incident to inflammation of the iris and cornea, going on with the further culminating steps after such inflammations have subsided.

It will be observed that glaucoma is the negative phase of an affirmative process.

It must also be remembered that glaucoma never occurs except in patients who are subject to a very grave, prolonged and peculiarly adverse liver condition, which is nearly always superinduced by living at low altitudes, in very humid districts.

Several places in the United States are peculiarly productive of glaucoma—New York City and Long Island; Ashland, Wisconsin; Cleveland, Ohio; and New Orleans, Louisiana, may be mentioned as leaders.

In the early phases of glaucoma the difficulty may be wholly removed by correcting the condition of the liver, and releasing nerve occlusion to the eye-balls. Later on, and when the phase of abnormality has become very pronounced, the result is very much less certain, and, of course, there are conditions of such gravity that nothing can be accomplished.

Cataract is the culmination of the dropsical condition in the aqueous humor of the eye.

Like glaucoma, cataract is the accumulation of the solid residues from lymph retained in the aqueous body, which finally become impacted upon the crystalline lens.

It will be seen that this solid residue precipitation may be so slight as to merely produce a foggy vision, or it may be so complete as to entirely obstruct the process of seeing.

If cataract is taken in apt time, and occlusion of the nerves to the eye-ball is carefully and regularly released with proper address to the eye-ball itself, it may be wholly removed. That is to say, the accumulation may be eliminated from the aqueous humor, but after it has advanced to a certain precipitation it cannot be removed, and releasing occlusion will only serve to " ripen it" as it is sometimes called.

What is meant by " ripening" a cataract is to quickly produce a precipitation of the solid residues upon the lens, securing such activity that no more will form, after which the cataract may be removed by surgical methods, which may be advisable, for sight is restored, although it must be said that no case treated in this way has ever resulted in normal vision, for no extraneous substitute has been found for the crystalline lens.

Exophthalmia is the name given to a pronounced protrusion of the eye-balls, incident to congestion of lymph in the capsule of Tenon.

Incipient phases of this may occur as incident to many phases of abnormality. It is frequently a symptom that occurs as incident to indigestion, and almost universally as the result of sluggish kidneys. It sometimes occurs as incident to a chronic liver; and abnormality of other large digestive glands.

The phase of exophthalmia being discussed in this connection, is that which occurs concomitant with goitre, and is incident to the failure to transport liquids from the head, because of the obstruction presented by the enlarged thyroids, resulting in a chronic condition of the general nature that would occur from being continually choked, which is the actual situation.

It is understood, without further statement, that removal of exophthalmia requires reduction of the goitre, which will not be accomplished usually until orificial irritation, explained in the chapter entitled "Orificial Abnormality" in this work, has been removed by correction of the anomalous sex orifice or orifices.

Of course, in all of the phases of anomaly and abnormality discussed herein, all of the rules of diet and general conduct so frequently laid down in this work must be carefully observed, and peculiarly all parts that may be irritated by dirt or accumulation must be kept clean and sanitary. However, no drugs of any character, stronger than a normal salt solution should ever be used in the eyes.

In all cases of muscular accommodation or abnormal refraction glasses properly constructed to overcome these difficulties is the correct and proper palliation. This particularly applies to hypertrophic, myopic, and astigmatic conditions.

Relating to remove occlusion to the eyes is directed to freeing the nerves extending from the fourth thoracic, and occiputo-atlanto-axial trunks. Incident thereto, however, it will usually require release of the nerves to the liver and kidneys.

THE EAR

Anomalous construction of the ear may be so marked that the auditory machinery is not present. A condition of this kind is usually referred to as congenital deafness.

If the tissues of the ear have been normally presented, abnormality of function will only occur as incident to the general phases of tissue distortion, which, of course,

are occlusion, congestion, inflammation, inflammatory catarrh, and exuding catarrh.

The different phases of abnormality of the ear must be considered under (1) abnormality of the external ear, (2) abnormality of the middle ear, and (3) abnormality of the inner ear.

Abnormality of the external ear is confined to congestion, inflammatory catarrh, and exuding catarrh, and includes the tympanum or ear drum.

Of course, these phases may become so aggravated as to result in tumors of the external ear, and these may be so extensive in their nature as to wholly disintegrate the tympanum, which results in deafness of a peculiar character, in that sounds cannot be distinguished, although they can be heard, for since the handle of the malleus cannot be titillated by so-called sound waves, vibrations cannot be normally transmitted to the inner ear, and, therefore, hearing in its true sense cannot be accomplished.

Abnormality of the middle ear, of course, includes all characters of congested, inflammatory and catarrhal conditions that may occur in the mastoid antra, the mucous lining of the Eustachian tubes, and the middle ear itself, which, of course, includes those conditions in the mucous and periosteal covering of the ossicles of the ear, the mucous membrane lining of the middle chamber and the tissues adjacent thereto. The phases just mentioned may express any degree of gravity from an increased mucus discharge to tumors of the middle ear, and also to what is called mastoiditis.

Under certain adverse kidney and skin conditions, incident to marked occlusion of nerves ramifying the

ossicles of the ear, it sometimes happens that the ossicles of the ear undergo an acute inflammatory process peculiarly centered to their articulations, which amounts to inflammatory rheumatism, the sequel to which is calcification in those articulations, resulting in ankylosis. In such an event, of course, it is impossible to transmit vibrations of the atmosphere normally to the inner ear, and partial or complete deafness is the result, depending upon the degree of ankylosis.

Abnormality of the inner ear is very largely a mystery, since it is not exposed to direct examination, and all that is known about it has been ascertained by the dissection of cadavers, and post mortem examinations, which, because of the delicacy of its construction, are wholly inadequate to reveal much that may be depended upon.

However, we are able to make correct deductions as to the inner ear, and we know that, like all tissue, it is capable of undergoing the regular phases of tissue abnormality, therefore, it undergoes congestion, inflammation, and any of the catarrhal conditions that may occur anywhere, under the same phases of irritation and reaction.

In the same character of process as described with regard to rheumatism of the ossicles of the ear, calceous substance may encrust the semicircular canals, the tubes of the cochlea, and the cavities of the saccule and utricle, in which event atmospheric vibrations transmitted normally through the external ear, and the ossicles of the middle ear, cannot be received, normally by the inner ear, and correct titillation of the terminals of the auditory nerves does not occur, and the process

of hearing is aborted in ratio with the interference. This sometimes only amounts to uncertainty of hearing, but may result in complete loss of the ability to hear.

Incident to the ear, it must be remembered that all parts which are exposed to the air must be kept clean. There is much carelessness in this regard on the part of persons that are otherwise recognized as being cleanly. The ear is so constructed that depuration from it under ordinary circumstances, will be accomplished if the external ear and the meatus are properly exercised.

However it may be well understood that even where the proper exercise of the ear is performed, it is possible by accident for substances to be forced into the orifices of the Eustachian tubes that must be removed, if the ear is to be normal.

The external meatus should never be washed except in emergency, and when necessary it should be washed with a soft-nosed syringe, the water being projected along the dorsal wall of the meatus so as not to strike directly upon the tympanum, and should be given opportunity to flow across that membrane and back out along the ventral wall of the meatus as rapidly as it enters. Great care should be taken not to give the water too much force.

Occasionally the Eustachian tubes should be syringed, but when this is accomplished, it should be done under the hands of an expert, and would be very much more safely accomplished if the patient was placed under the influence of an anesthetic, at least under the influence of gas during the operation.

The ears should not be picked as a general rule, but if hard or crystallized cerumen has accumulated in them,

it should be carefully removed with an instrument, but the habit of carrying an ear spoon, or other instrument, and continually picking the ears, should not be indulged.

Many cases of so-called hard hearing coming to the doctor will be found to consist wholly in a long continued, impacted condition of wax on the tympanum of the ear. In such cases, of course, cleansing of the ear is all that is necessary to restore normal conduct.

Relating to remove occlusion to the ear will, of course, be to free the nerves that extend through the third thoracic trunks, and the second and fourth cervical trunks. It will be necessary usually to give attention to the nerves to the large gland areas of the body. That is to say, the spleen, liver, pancreas and kidneys; for nearly always interference with hearing is incident to the precipitation of solid residues of acid in the ear.

Incident to ear defects, it is nearly always necessary to give attention to the external meatus, restoring its relation to other tissues. This may be accomplished by using the pinna as a lever through which movement of the cartilaginous meatus can be obtained.

It not infrequently occurs that the mandible is distorted in its articulation with the temporal bone, so that it rides back against the meatus, in which event it must be corrected in such manner as to bring it into proper relation with the glenoid cavity, thus freeing the meatus, and the nerves which ramify and extend in relation with it.

To remove calcification of the joints of the ossicles, the latest Chiropractic method is a manipulation—accomplished by a machine invented by Dr. Phillip Rice of New York, through the Eustachian tubes,

thus breaking down the calceous accumulation, freeing the articulation, and securing normal vibratory transmissions to the inner ear.

Relating to remove occlusion of stimulus to the ear consists in freeing nerves that extend through the third thoracic, and the second and fourth cervical trunks. In addition it will many times be necessary to free the nerves to the external meatus by correcting the position of the mandible, thus not only releasing the external meatus, but freeing nerves that extend through that pathway to the middle ear, and in the opposite direction.

Incidentally, of course, as a constitutional proposition, there will be the release of the nerves to the large glands of the body, particularly those to the kidneys, to prevent further precipitation of acids, and many times to the large digestive glands to stop the production of an excess and abnormal chemistry.

THE NOSE

The subject of abnormality of the nose has been fully discussed by analogy in so far as the subject pertains to occlusion, congestion, inflammation, inflammatory catarrh, and exuding catarrh.

All that needs to be said in addition in this connection is that frequently occlusion of nerves to the nose, and its antra, not only results in the phases of abnormality just mentioned, but serves to change the form, shape, and functional value of the cartilaginous and osseous parts of the nose.

As a result of such occlusion, the turbinated bones are frequently distorted, the vomer and median septum of the nose distorted to one side or the other, or even in

other ways, and the cartilaginous alae, and osseous relations of the external nose, are distorted.

Because of the conditions enumerated in the preceding paragraphs, commercial surgery has fattened upon the frailty of human beings, who, of course, are ignorant of the fact that surgical interference never corrected such conditions, but in a majority of instances seriously interferes with the value of the nose.

The Chiropractor must have in mind that under proper release of the nerves to the nose, none of the difficulties to which surgery has addressed itself, will be impossible of correction. The cartilaginous wings of the external nose can be elevated, and corrected in their position; the septum straightened, and by proper sanitation, inspiration, and expiration, all of the adjacent antra and sinuses can be made to function normally without any surgical intervention.

Of course, there could be distortions in the nose which would render surgical assistance advisory, but these occur so rarely that surgical interference must be relegated to a last extremity.

Relating to release occlusion to the nose is primarily in the occiputo-atlanto-axial area, together with the fifth cervical and third thoracic areas.

THE THROAT

This subject has been fully discussed under laryngitis, pharyngitis, diphtheria, etc.

All that needs to be said in this connection is a direct reference to the numerous, inflammatory conditions that occur in the throats of many persons, which do not come fully within any of the classifications named.

In this connection it is necessary to again emphasize the fact that the continuous tendency to congestion and inflammation of the eyes, ears, nose and throat are usually caused by motor reactive results from anomalous sex orifices, or the reactions from pathologic orifices in the feetward aspect of the trunk.

In this connection the author feels it necessary to say that in the investigation of many thousands of cases, he has never seen an exception to the rule laid down, and has never seen a child with a chronic inflammation of the tonsils, with chronic congestion of the eyes, with a continual tendency to inflammation of the ears, or earache, or catarrh of the nose, or any inflammatory condition of the throat, which was continuous, which was not pronouncedly an orificial case, and therefore, fearlessly states that such conditions do not occur in those not thus abnormal.

Relating to remove occlusion to the throat is primarily release of the fourth thoracic nerve trunks, and incidentally the occiputo-atlanto-axial area. This has been more fully covered in connection with pharyngitis, to which the student is here referred.

In concluding this chapter, let the student remember that occlusion to the eyes, ears, nose and throat are frequently because of occlusion of intervertebral nerve trunks, which ramify cortical areas at the origins of the optic, auditory, olfactory, glosso-pharyngeal, hypoglossal, and pneumogastric trunks, and when these phases occur those intervertebral nerves are the primary areas of release.

If distortion should be found at the specific areas suggested in this chapter, of the gravity to produce the

pathology in the given case, the practitioner must exercise his diagnostic ability in locating occlusion of nerves elsewhere that ramify the cortical areas at the origins of the nerves mentioned, and secure the release of such nerves.

It must also be remembered that occlusion to the eyes, ears, nose and throat may occur by injuries to the skull causing pressure upon the brain, or by exostosis, calcification or accumulation of gumma around the foramina, or along the sutures of the skull thus impinging upon brain substance.

CHAPTER XLVII

LOSS OF VOLITIONAL POWERS

General Paralysis—Hemiplegia—Periplegia—Facial Paralysis—Writers' and Telegraphers' Paralysis—Paralysis Agitans

Volitional power, in the sense to be discussed in this chapter, is lost when any portion of the organism for any reason does not respond to the emotional impulse to direct it.

Without going into any extended discussion, the student will understand that all of the somatic muscles and tissues of the body, and indeed many others, are said to be under the control of the will. That is to say, are constructed in such manner as to be capable of control largely according to volitional desire.

In a limited sense, any part of the organism, which is constructed to respond to volitional impulse, but which does not do so, is paralyzed. Of course, the paralysis just referred to may be of such a temporary character as not to fall within the general scope of those phases recognized as paralysis, but in that exact sense they, nevertheless constitute a paralyzed condition.

For example, if one should hang the arm over the back of a chair, pressing the nerves of the brachial plexus around the axillary artery until the arm, forearm, and hand are in such condition that no volitional control can be exercised over them, they are temporarily paralyzed, although we do not call that condition

paralysis, but we say those parts are " asleep" or numb.

The test of the proposition just stated lies in the fact that if the numbness continues we would call it paralysis, but because it is transient and soon disappears, we apply the milder terms of numbness, or " being asleep."

The adverse, functional process and tissue condition which is called paralysis is always the result of an adverse, glandular condition by which toxins are produced or retained, or both, in the organism, and which toxins precipitate or accumulate in areas to which nerves are occluded, and are agents, which cause nerve terminals and ganglia to react upon them in such manner as to be incapacitated to transmit functional impulse.

Some Chiropractors have thought, and have written, that paralysis is caused by certain subluxations, or certain vertebral distortions or disrelations. This conception is altogether too limited for it does not explain the situation.

It is perfectly true that the tissue condition, and functional process called paralysis could not occur if there were not skeletal distortions producing occlusion of stimulus in a multitude of nerves. Occlusion produced that way does not cause paralysis, but it does set in operation an adverse process that ultimately results in the production of toxins, which as chemical agents, produce the nerve debility that is called paralysis.

Removal of occlusion at the places of incipient distortion will not remove paralysis, because the process has become one of general failure of depuration and elimination as well as a distortion in the perfunctory sense of that term.

It has already been stated that paralysis never occurs except as the result of long continued, general, glandular abnormality. The glands involved are primarily the spleen, liver and pancreas, but finally and paramountly the kidneys.

Of course in connection with the large glands referred to there is great abnormality of the lymph glands of the whole organism or area affected, which situation furnishes the most marked resistance to recovery.

When the chronic, glandular conditions, just referred to, exist, it must not be thought that distortion is anything like commensurate with the paralysis, for the latter is the cumulative result of a long continued failure of the body, perhaps because of comparatively slight occlusion, to keep up, on the process of depuration and elimination.

In other words, to make the last statement clear, occlusion such as is found in paralysis would not, as an incipient proposition, affect volitional control of the muscles to an apprehendable extent, and does not affect the control of the muscles in the paralysis, except through the accumulation of adverse chemistry, which inundates nerve terminals, nerve ganglia, etc.

Paralysis is to a large extent an illustration of occlusion by disintegration; occlusion of nerves and ganglia, because they are emersed in a precipitated chemistry, which compels reaction upon it, to the prostration of them, beyond volitional transmission.

By paralysis, therapists mean to indicate a disease in which there is loss of motion or sensation, or both motion and sensation; the fact being that both motion and sensation are incident to volition. It is a remarkable

phenomenon of the human organism that it, or parts of it, may be in such condition as not to respond generally to volitional impulse, and still to respond in sensation; or to have lost sensation, but still to respond in volitional movement to a limited extent.

The phenomenon just referred to is significant in that it establishes the fact that certain nerves called motor, and certain nerves called sensory, which are also motor nerves, are, nevertheless, distinct from each other, and are not capable, as the therapists have taught, of transmuting a sensory titillation into a motor impulse, or a motor titillation into a sensory impulse.

The phenomenon referred to fully establishes the fact that nerves function according to the cortical area from which they have origin, some of them having the capacity to control motion only, while others have the capacity of sensation and also of motion.

There is a still further phenomenon that is more important, and really more awe-inspiring than the two mentioned, and it is that both volitional control of, and sensation from, a part may be lost, and still vitality in that part remain to a very large extent unimpaired.

The evidence just referred to furnishes proof of another remarkable phenomenon—that there are certain motor nerves of volitional control, and sensory nerves because they have origin from the cortical cells of the brain in which consciousness is produced, that are also motor nerves; and that all other nerves are under the control of the department of tissue sense, and that such nerves are motor and have full charge of the processes of vitality.

If the nerves from the tissue sense portions of the

cortex were not wholly distinct and separate from nerves of volitional, motor control and sensation, when volitional motion and sensation were lost, vitality would also be lost, and if that was true anything like pronounced paralysis would always be immediately fatal.

In many phases, paralysis is confined to local areas, in which event it is not difficult to remove, because depuration of toxins from the area can be quickly obtained, after which sufficient time for rehabilitation of the tissues involved will be all that is necessary for complete restoration.

Of course, it goes without saying that the more widely the organism is affected by the precipitation of the paralytic toxins with proportionate tissue injury, the longer it will take, and the more difficult it will be to remove the adverse process and tissue condition.

One thing that makes the removal of general paralysis difficult is the fact that not only are the volitional, skeletal tissues affected, but the deep, visceral tissues are affected as well, and all of the avenues of depuration are materially weakened, and elimination of toxins is rendered most difficult.

GENERAL PARALYSIS

This phase is a tissue condition in which the paralytic toxins are distributed throughout all parts of the organism in sufficient amount to affect, at least to some extent, both volitional control and sensation. Such a situation is proof of grave and chronic general glandular abnormality, and will usually prove fatal.

However, under the application of the principles of

Chiropractic, a great many cases of general paralysis may be wholly removed. The question of restoration depends entirely upon the amount of tissue injury that has resulted, which is another way of saying that it depends upon the character of the toxin that has accumulated, and the extent of nerve tissue injury involved.

Relating to remove general paralysis is directed to all of the motor reactive centers of the vertebral column. In other words, release at the sciatic foramina, sacro-iliac areas, the lumbo-sacral, and thoracico-lumbar, the seventh thoracic, the fourth thoracic, the brachial area, the phrenic area and the occiputo-cervical area.

Aside from the relating indicated, every means to encourage depuration and elimination in the care of a patient, consistent with his strength and condition, must be employed, and in this connection, and in connection with all phases of paralysis, it cannot be too strongly impressed that fasting for a considerable period, or in any event reducing the diet to nothing but broths and soups, is always indicated, for in all phases of paralysis the adverse process has been superinduced by excessive indulgence, either in eating or drinking, or both.

Usually there is also a history of excessive indulgence in sex relation, and therefore, complete rest of the alimentary process, as well as other functional parts of the body are primarily indicated.

HEMIPLEGIA

Hemiplegia is a tissue condition and process in which the body on one side of the mesial plane is

markedly affected by paralysis while the other side is only slightly affected.

It is somewhat difficult to understand how a hemiplegia can result, because the mind reverts to the thought that the liquids are generally distributed over the body; but that is not the paramount proposition. The reason hemiplegia occurs is that incipient occlusion produced stases on one side, as the result of a rotary distortion, and, therefore, the paralytic toxins precipitated only in the tissues of that side.

In this situation the rotations are not so marked as one would imagine, but seem to be slight, the hemipelgia occurring only after a long, chronic, cumulative process.

Relating in this phase is identical with that of general paralysis.

PERIPLEGIA

This is a tissue condition in which some phase of paralysis is indicated in the body from the level of the twelfth thoracic vertebra down to and including the feet.

This phase of abnormality is incipiently caused by the general, adverse, glandular conditions incident to general paralysis, producing a toxin that, because of occlusion, from the thoracico-lumbar area down, accumulates in areas of stasis in the corresponding tissues.

This phase of paralysis is much more easily removed by the application of the principles of Chiropractic than either of those discussed, although it is the same character of process.

Relating in periplegia is directed to removal of occlusion at the thoracico-lumbar area, fourth and

fifth lumbars, the sacro-iliac areas and the sciatic foramina. Incident to this correction, occlusion of nerves to the large glands must be removed to secure glandular activity and depuration.

FACIAL PARALYSIS

This is but a circumscribed phase of the general process under discussion, applied to the face, and usually primarily involves what is called the cranial trunks; the function of which is corrected by releasing vertebral nerves to the cortical areas from which such nerves have origin. Facial paralysis is usually very difficult to remove.

Relating to remove facial paralysis is to release the third thoracic, the first, second and third cervical trunks, and incidentally local release by application of thrusts over the temporal region, and for correction of the relation of the mandible, etc.

Of course, the relating referred to is in the local phase, but there will be the same general chronic, glandular condition to correct as in all other phases of paralysis.

WRITERS' AND TELEGRAPHERS' PARALYSIS

Writers' and telegraphers' paralysis is a condition peculiar to the shoulder, elbow, wrist and hand, and results from the excessive use of these parts incident to the general, chronic, glandular condition productive of paralytic toxin; the congestion incident to use causing the precipitation of such toxins in the tissues referred to.

Relating for the removal of these phases is directed to the release of the nerve trunks of the brachial plexus

especially on the side involved, and to the release of the brachial nerve trunks in and about the axilla; and, of course, requires correction of the general, glandular condition as in other phases of paralysis.

PARALYSIS AGITANS

This phase of abnormality is ordinarily called "shaking palsy." It is that phase of abnormality in which there is muscular convulsions, which results in the head, arms, hands, feet and legs being constantly in a tremulous or agitated motion. All of these do not necessarily occur in every case. Sometimes the muscles controlling the head are the ones definitely affected, or perhaps one arm and hand, or both hands, or the legs and feet.

However, usually where there is paralysis agitans the head and appendal parts of the body are to some extent affected.

In mild phases of paralysis agitans the patient will be able to control the muscular convulsions by a great effort, but in the graver cases he will find it impossible to still the shaking part. In such conditions it is next to impossible to hold the parts sufficiently to stop the convulsive spasm, except by the application of force sufficient to injure the tissues involved.

Paralysis agitans, and all tremulous muscular, conditions result from a characteristic distortion, in which the seventh thoracic vertebra is projected sufficiently dorsal to become a pivotal center upon which the body above and below tremulously react.

Of course, this situation in itself would not necessarily cause tremulous, muscular conduct, but, in connection

with the adverse glandular condition incident to these phases, which is that of incipient paralysis, this skeletal distortion is sufficient to set up and continue the convulsive movement. The author has observed cases of paralysis agitans in which the convulsive movement would cease so long as gentle pressure was applied over the seventh thoracic spine, and would begin again immediately pressure was removed.

Relating to remove paralysis agitans, or shaking palsy, is primarily directed to the correction of the seventh thoracic distortion, and, therefore, the ventral reduction of that thoracic area; to securing release of nerves of the brachial and lumbo-sacral plexuses, and nerves to the muscles which particularly control the head.

General suggestions in connection with paralysis of all kinds should here be made, and first let the reference be to diet, and let it be remembered that excessive indulgence in food and drink is the paramount cause of all phases of paralysis and to this there is no exception.

Excessive venery, and the phases of disease that are incident thereto many times are irritants of a profound nature, which intensify the adverse, chronic, glandular conditions, and prepare the way for phases of paralysis.

Excessive drinking of intoxicants checks depuration and elimination, and results in the accumulation of morbidity, which may become paralytic toxins, and this is equally true of the use of narcotics.

Incident to the phases of this chapter it must always be remembered that certain injuries to the brain produce a condition often erroneously called paralysis. Of course, the reference is to where the skull is injured

or crushed so that it presses upon the brain. Trephining in such cases will usually remove the numb condition, which is analogous to a part going to "sleep," because the nerves to it are inhibited.

It is well known that in syphilis, and in some other phases of grave, chronic abnormality, especially in the medication therefor, gummatious and other solid precipitations, frequently occur around the foramina of the skull, impinging upon or destroying nerves that extend through them, occluding stimulus and sometimes causes paralysis. In other cases accumulations of these substances occur along the sutures and lymph areas in the inside of the skull, pressing upon brain structures causing paralysis.

In all such conditions the problem is definitely referred to surgery, but as yet no definite means has been discovered for the surgical removal of these, and until that has been accomplished such phases of so-called paralysis must remain impossible of recovery.

The student must clearly remember that there is a profound distinction between that phase of so-called paralysis, superinduced by the character of pressures last discussed, and the general, adverse and toxic condition which produces the ordinary phases of paralysis, for between the two there is really no relationship.

CHAPTER XLVIII

ABNORMALITY OF LOCOMOTION

Locomotor Ataxia—Infantile Paralysis—Other Phases

In one sense of the word we have just finished a discussion of a series of interferences with locomotion, which would seem to be sufficiently comprehensive, but do not quite completely cover that phase of abnormality.

In this chapter the discussion will be directed to a phase of disturbance, in which an interference with locomotion seems to be more definitely paramount, although in the last analysis that is not true, but the phases to be discussed are peculiarly characteristic.

All phases of abnormality have their characteristic anatomic distortions. However, in the multitudinous presentation of phases the fact just stated is frequently overlooked.

The therapeutic world is not conversant with the fact just stated, principally for the reason that it had no opportunity of being so, and it is a remarkable fact that the majority of Chiropractors have not grasped this fundamental truth, and do not understand that it is a fact.

There are a few phases of abnormality in which the characteristic distortion stands out so definitely that all who run should read. The reference is particularly to the distortions incident to asthma, exophthalamic goitre, etc. The point made prominent is that all

symptomatic, chronic processes present their characteristic anatomic distortions.

The phases to be discussed in this chapter then are not distinctively peculiar, because they present characteristic distortions, but are peculiar in that they present such typical universal and definite distortions.

LOCOMOTOR ATAXIA

As has been indicated, locomotor ataxia is only another phase of paralysis, the primary symptom of which, capable of being noticed by the patient himself, is a peculiar interference with the use of the feet and legs in an attempt at locomotion and a waning consciousness as to where those members are when not looking at them.

Of course, at first the interference is slight, and only amounts to a difficulty in commanding the feet and legs volitionally. There is no sense of pain, but if the patient is a very careful observer, he will notice that there is less than normal sensation in the feet and legs.

The student of the human body, however, must not imagine that the situation is simple by the time the patient is able to notice it himself, for by that time it has already become a very grave phase of chronic abnormality.

Primarily and immediately ataxia is caused by a series of grave subluxations in the thoracico-lumbar area of the vertebral column, which occur in such way, and to such extent as to produce a short, sharp, pronounced, V-shaped lordosis, in which the twelfth thoracic vertebra, is usually the deepest and is frequently a lordotic key.

The vertebrae involved in the production of the

lordosis just referred to are usually the tenth, eleventh and twelfth thoracics and the first and second lumbars.

Occasionally in the V-shaped lordosis, incident to and causative of ataxia, the first lumbar and twelfth thoracic vertebrae are equally deep, but as has been suggested, this is not usually true, but when they are of equal depth the third lumbar is also involved in the lordosis.

The weakness out of which the lordosis of locomotor ataxia is produced may be the result of so many things that it is almost impossible to enumerate them. First, and paramountly, it results from an hereditary degeneration of the tissues of the vertebral column in the area of the lordosis described, peculiarly in the ventral aspect of the vertebral column.

The degeneracy just referred to may be incident to what has been therapeutically denominated tuberculosis, or it may come from excessive sexual indulgence on the part of ancestors, followed by the person himself. It may result from congenital influence incident to chronic acidosis in preceding generations, accompanied by a progressive and cumulative kidney weakness, which finally results, not in rheumatoid condition as would be expected, but in tissue degeneracy of the ataxia area of the column.

The therapeutic world has almost exclusively charged ataxia to injuries resulting from syphilis, and the incidents that accompany that phase of abnormality. This, it must be understood is true only to the extent that such abnormality results in the degeneracy of tissue in the ataxia area.

The student should know, however, that syphilis and

the mercurial treatment for it, which is increased by the introduction of Salversan or 606, is a very fruitful cause of tissue degeneracy, that is always closely related to kidney abnormality, and therefore, to weakness of the kidneys, intestinal and procreative abnormality, the motor reactions from which peculiarly affect the area of the lordosis necessary to ataxia.

In connection with this discussion, it must be remembered that syphilis will not cause locomotor ataxia, nor prepare the way for it; but at the same time it must be known that patients will not be inoculated with the virus of syphilis unless there is occlusion of stimulus in the nerves of the ataxia area produced by subluxation, and therefore, it is not surprising that occasionally the adverse tissue effects of the process of syphilis increases these injuries sufficiently to prepare the way for the lordosis which causes locomotor ataxia.

There is a theory on the part of therapists that ataxia is caused by an injury to the dorsal columns of the vertebral cord. This is in no sense incipient in the production of ataxia, and may not be in existence at all, although in the more definite and later phases there is some pressure on the dorsal aspects of the cord because of the very sharp " V " of the lordosis.

The pronounced injury that occurs incipiently is the stretching of the visceral gangliated cords around the lordosis and the compression of them between the ventral protrusion of the column and the abdominal viscera, while, of course, incident to the pressure and traction of the gangliated cords, there is also pronounced traction of the visceral primary branches. The primary lateral, somatic branches, which ramify the parieties of

the abdomen, the thighs, legs, and feet, are also much tractioned resulting in marked occlusion of stimulus to all of these structures.

It is occlusion ever widening and intensifying, produced in the manner just described that causes the characteristic symptoms abdominally, and of the extremities, which are so prominent in ataxia.

The symptoms just referred to are a sense of a band being tied tightly around the trunk at the level of the twelfth thoracic vertebra, accompanied by irregularity of intestinal conduct, accumulations of gas, etc., with a characteristic lack of consciousness of conditions at the orifices of the body. Incident to this, there is a loss of consciousness, in whole or in part, as to what position the feetward end of the trunk, and the thighs, legs, and feet are in.

In the incipient condition, the loss of knowledge as to the whereabouts of parts mentioned is only partial, but by the time the lordosis becomes marked, and grave, there is complete loss of consciousness, of where these parts of the organism are, and a knowledge of where they are can only be had by the patient when he can see them.

Ordinarily the first outward symptom of ataxia is a flappy and uncertain application of the feet to the ground in walking, with a partial lack of knowledge of just where the feet are, so that in the dark the patient stumbles and is unable to accommodate himself to the unevenness of the ground, and if he cannot see he staggers and must sustain himself, while in the grave phases of ataxia, if he cannot see he will fall in any direction, for he has no means of determining relativity

by sensation through the feet, legs and thighs to the active parts of the body.

Incident to the injury productive of ataxia, there is a marked change in the iris of the eye, covering the whole ring incident to the large glands and kidneys, while the general acidosis incident to the incipient phases have served to give the outer ring of the iris a cloudy brilliancy indicative of inflammation. All of these changes together give the iris an expression of a stare; an expression as though of fear, and indeed the expression of fear is intensified by the fact that the patient constantly knows that he may fall. The expression from the condition of the iris once seen should not be forgotten.

The victim of locomotor ataxia, should be at once put to bed, and kept there so as to take the longitudinal weight off the vertebral column, which, of course, cannot be done so long as the patient insists upon trying to walk.

The student should remember that a lordosis of the gravity described in this chapter cannot exist without marked debility of the intervertebral cartilages of five articulations having occurred, ventrally three must be very grave. If, therefore, success is to be attained in the removal of the adverse phase, an opportunity must be given these cartilages and the other structures of the joints involved to rehabilitate themselves, which cannot be done if the patient puts longitudinal weight upon the vertebral column.

Notwithstanding the last statement, the author has helped several cases of incipient ataxia, without taking the patient off the feet, but in those cases the restora-

tion was not complete, nor was the improvement accomplished in anything like the time that it could have been accomplished if the patient had been willing to keep to the recumbent position, until the cartilages, ligaments and other tissues affected had time to be rehabilitated.

When it is remembered that the tissues adversely affected are cartilage and ligament, the student will understand that the patient must be kept off his feet for not less than three months, for it takes that length of time under the most favorable situation for such tissues to heal. The reader must not be surprised by the statement that a better approximation as to time is four to ten months.

During the time the patient is kept off his feet, he should be exercised each day in every muscle of his body, not only as to the appendal parts, but as to the trunk, as thoroughly and carefully, as he would be in the ordinary way, by walking three or four miles.

The exercises given, however, must be administered with the patient lying upon the dorsum, venter, or upon the side, and avoidance of any exercise that puts longitudinal constriction upon the vertebral column, especially relative to the lordosis must be observed.

During the period of application of the principles of Chiropractic for the recovery of ataxia, the patient should be very carefully dieted, and in connection with the diet it must be remembered that the machinery of digestion, particularly the intestine, is very gravely impaired, as is also the power of absorption, transportation, extrusion and assimilation in the areas pronouncedly affected and therefore, very little food of nutritious value will be sufficient.

Incident to the irritations from the general lordosis, and peculiarly from the intestinal condition already referred to, the patient will present a voracious appetite, but this does not indicate need for food, and the appetite must be quieted without the administration of food.

The feeding should be monodiet, and meals should be separated by a period of at least eight hours. Three very light meals in twenty-four hours thus separated may be used, but very much the better plan is to have but two meals, separated by a period of twelve hours.

During the time of attention the patient must not be permitted to use any exciters or narcotics, in which is specifically included all intoxicating beverages, and other habit-forming drugs, including tobacco, tea and coffee. The patient must not be permitted to enter into any sexual relations, and must be kept away from all sex excitation. He must not eat eggs or drink milk, and should eat no oil. Therefore all gravies, salad dressings, etc., are prohibited.

Relating to remove ataxia is, of course, primarily directed to raising the V-shaped lordosis already described. However, as incident to that it will be understood that there are distortions in the pelvic girdle, and there are distortions incident to the compensations that have resulted in the mid-thoracic region, peculiarly affecting the eyes, stomach and brain. These must, of course, be reduced concomitantly with the V-shaped lordosis.

When the lordosis has been overcome the patient may be permitted at first to assume a reclining position, and then after a time, say a couple of weeks, to a partly sitting posture, and after occupying that position for

two weeks to a month, he may assume the standing position for a short time each day, developing the power to stand, for a period of a month or so; then he may be permitted to walk a few steps, but for a year or two the patient should not be permitted to walk much, or to remain upon the feet but a short time at once, and he should be cautioned that thereafter he must most carefully avoid longitudinal shocks and continued, longitudinal pressure upon the vertebral column. He should never carry anything of any weight in his hands nor upon his shoulders.

INFANTILE PARALYSIS

This is the phase of abnormality that the therapists call " anterior poliomyelitis." They say it is " an inflammation of the anterior horns of the substance of the spinal cord." They also pronounce it " an acute, infectious disease, affecting children usually about the period of the first dentition."

Therapists also declare that infantile paralysis " is caused by a specific organism, but the mode of transmission is not yet definitely determined."

These theoretic asservations on the part of the therapeutic world do not help any in a solution of the actual problem which this phase of abnormality presents. Something far more definite is capable of being, and, therefore, must be stated.

Infantile paralysis is very frequent in children from about the time they begin to walk until they attain sufficient discretion and experience in locomotion to generally prevent themselves from being injured.

The phase of abnormality, generally referred to as

infantile paralysis is always the direct and specific result of a characteristic pelvic injury, the injury referred to being a subluxation of one or both of the sacro-iliac joints.

In a very great majority of cases, the right sacro-iliac joint is severely subluxated. This distortion is quite generally accompanied by a greenstick fracture of the sacrum, and a marked rotation of the right innominate usually with its ventral iliac spine lateral, while the tuberosity is mesial.

When the distortion as last described is the causative distortion of this phase of abnormality, the left ilium is usually mesial and over the left aspect of the base of the sacrum, which causes the sacrum to be rotated by its ventral aspect to the right, thus forcing its left, ventral surface deeply against the viscera of the pelvis, and tractioning the nerves which extend through its ventral foramina, while the left margin of the apex of the sacrum is projected ventrally, lessening the space through which the sciatic and pudic trunks escape, the sciatic to ramify the leg and foot, the pudic to ramify the peritoneal region. The nerves that extend down through the pelvis to ramify the regions of the articulations of the femurs, and the mesial aspect of the thighs, are occluded by the pressure incident to the distortion.

As a complement to the distortion and grave occlusion just described, the distorted attitude of the sacrum causes a rotary compensation, by which the fifth and fourth lumbar vertebrae are, by their ventral aspects turned to the right, while the second and first lumbars, together with the twelfth, eleventh, tenth and ninth thoracics are, by their ventral aspects turned to the left.

This left compensatory rotation, incident to the basic distortion results in marked occlusion of the eleventh and twelfth thoracic, and the first and second lumbar trunks, which ramify the lower left pelvis, the mesial aspect of the thigh and leg to its medial third.

The distortions described, in a large majority of cases occur incident to babies being dropped, or falling off beds, or taking sitting falls when learning to walk, or taking such falls in their early and careless efforts at equilibrium in play, and other venturesome procedures.

A very foolish notion has been abroad for a long time, that because a baby's skeletal tissues are largely cartilage and soft bone, that he cannot be permanently injured, or in fact injured at all by falls, shocks, and sprains, which would gravely injure older people. This is a very erroneous and unjustifiable error. Babies and young children are just as frequently injured, and gravely so, by falls, etc., as are young adults.

Incident to the characteristic injuries just described, and others that frequently occur, as provocative of so-called infantile paralysis, the immediate effect of the injury is the chill produced by the shock of injury, followed by fever as pronounced and sudden as the shock, and of the same gravity, which usually subsides in a short time, but during which much contraction and injury to the nerves by precipitation of toxins has occurred that also produces occlusion by disintegration, hence accommodation to the situation does not take place, and growth in the member specifically affected is suppressed, notwithstanding that a certain amount of vitality is retained.

Frequently, through motor reactive influences inci-

dent to the visceral system, the shock of occlusion produced by the basic, pelvic distortion described, reacts through the visceral somatic nerves to the base of the neck of the same side, which, together with the compensatory distortion and toxination, result in grave occlusion to the nerves of the brachial plexus so that, subsequent to the fever, the shoulder, arm, forearm, wrist and hand will be effected in like manner as the lower extremity.

Generally the phases of infantile paralysis do not present themselves in any other symptoms than the suppression of growth, at the worst in the leg and arm, but sometimes the injury is so great as to effect both legs and both arms, and occasionally the brain, so that there is loss of locomotion and suppression of brain development, and therefore, failure of mental development.

Of course, occasionally the incipient injury is so grave that the patient dies as incident to the fever.

The distortion described is not transmittable, therefore, the suggestion that infantile paralysis is infectious or contagious is untenable and preposterous. The author has observed hundreds of cases of so-called infantile paralysis, and has received reports from thousands of cases, and states without fear that the characteristic pelvic distortion as the result of specific injury, will be found to cause every case.

Infantile paralysis is not contagious. Of course, by the time the process has gone on to a pronounced fever, characteristic germs are produced as scavengers of the accumulated morbidity, but that fact in no sense tends to establish the contagion of infantile paralysis.

Therapists suggest that infantile paralysis is epidemic. The author wishes to state that in fifteen years of careful observation, he has never known a time when he and his graduates have not had hundreds of cases of this phase of abnormality under care, and during all that time he has not noticed much fluctuation in the ratio of cases.

In other words, this is no more than saying that in a given population there will be about the same number of children between one and eight years of age, and that their care will be characteristically the same, and that there will be about the same number undergoing the characteristic injuries that result in so-called infantile paralysis.

Relating to remove infantile paralysis, of course, is basicly correction of the distortion of the pelvis, and for that correction the student is definitely referred to the chapter on that subject in the first volume of this work. In addition to correcting the basic distortion the compensatory influences therefrom must be corrected. This will require address at the thoracico-lumbar, the cervico-thoracic, and the occipito-cervical areas.

Of course, it must always be understood that in connection with the relating suggested, the child should be carefully, sparingly and regularly fed on nutritious but easily digested foods, and should be most fully and carefully exercised, but incident thereto should be prevented from joining in any childish sports that would bring strain, or too continuous weight, upon the areas of distortion.

WASTING CONDITIONS

It is hardly necessary to go into a discussion of this phase of abnormality, for it has been quite generally and thoroughly covered under atrophy and anemia.

However, there is a phase of abnormality generally referred to as wasting palsy, in which there is a somewhat tremulous condition of the muscles, with a progressive atrophy. This phase of abnormality is one that occurs incident to characteristically adverse kidney conditions.

There are other phases called dry tetter, fish-skin disease, etc., all of which are of the same type and character, and indeed need no further discussion in this connection.

Relating to remove all such conditions is incipiently addressed to a correction of the kidneys, and incidentally the other large glands of the body, and also to securing release of nerve occlusion to the skin generally and by all means possible, including proper diet, exercise, clothing, breathing, washing, etc., securing the best depuration and elimination possible.

CHAPTER XLIX

PERVERSION

Mental—Emotional—Sexual

The word perversion simply means " to turn through or from," but custom has given to the word, in the sense now being used, the meaning of " turning from the usual and ordinary."

Perversion, then, in our general acceptance of the term, refers to any function of the organism which has turned from the usual and ordinary to another phase of conduct.

However, the term is not wholly divorced from the idea of volition in some sense, although it should be understood that in perversion the victim does not necessarily use any volition whatever in performing the adverse or changed conduct.

In connection with the matter being presented, it is well for the student to remember that after all there is no standard of mental, emotional, sexual, or other phases of conduct, and, therefore, there is no actual criterion, except what we conceive to be the usual, and it must be remembered that each individual has his own conceptions about what is the usual.

In connection with what has just been stated, if persons are found functioning in a way that the observer has never before seen, he is very apt to shake the finger of scorn, and use the epithet " Pervert! " without necessarily being justified in his conclusion.

The greatest charity should be exercised as to the conduct of human beings, for under long established hereditary influences, the human family must of necessity give expression to very divergent physiologic conduct. In other words, the idiosyncrasies of physiologic performance must be understood to comprise a very wide range.

Within the range of that very wide physiologic functioning any person may be accused of perversion, and yet the disposition of humanity to be narrow and accusing has greatly retarded evolution, by causing a general and indiscriminate fear to dominate in connection with entering upon any unusual performance.

The greatest men and women that the world has produced, during their day and generation have been considered "off" mentally, because they were capable of following a phase of conduct quite distinct from their fellows, and the long line of lessons on this subject should have taught humanity many centuries ago not to reach hasty conclusions, and too quickly indulge in epithets.

MENTAL PERVERSION

A mental pervert is, of course, in one sense of the word, always insane, and yet he must not be so classified, for insanity is usually thought to include lack of volitional powers, while the mental pervert retains, to a large extent, that capacity.

Mental perversion exists when the victim of it employs his intellect to the accomplishment of results in substantially the reverse of the usual and ordinary, or in direct opposition thereto, and cannot be convinced of his error.

It will be seen that such a situation really, after all, amounts to insanity, but of an extraordinary type.

There is another phase of mental perversion which should be discussed in this connection, and that is where the mind continually dwells upon destructive processes rather than constructive; where the individual is always planning to secure the downfall of some one, or some social department, instead of the good and evolution of him or it.

Perverts of the character last described do not receive sympathy from the human family, but constitute the most hated element of society, whereas such persons are peculiarly entitled to pity, and should have the most careful protection of the social fabric against themselves.

The difficulty about giving proper consideration to victims of the phase of pathology just described, is to know just what persons are within that class, for there is no well-defined demarcation. It is almost impossible to tell when the volition to be mean and scheming stops, and the irresistible perversion to perform the same character of acts controls the mind of the individual.

As a result of this situation humanity usually classifies mental perverts as mean, wicked, and scheming persons, and continues that attitude toward them until the perversion is sufficiently pronounced to be declared insanity, when the whole social attitude changes, and every phase of pity, sympathy, and protection is extended to them, when they have been entitled to the same attitude perhaps all of their lives. If that attitude had prevailed toward many persons early enough, they could have been saved from their perversion.

Mental perversion may result from two main situa-

tions. It may result: (1) from heredity, and it may result; (2) from injury in this existence.

From the standpoint of heredity, mental perversion may result from: (1) an anomalous cortical formation, which is so constructed in that part of it in which mind should be produced, that normal mentality cannot be produced. It may result; (2) from hereditary tissue habit, which renders the mental portion of the cortex incapable of producting normal mind, and it may result; (3) from immediate congenital adversity, which is of the nature of heredity and includes all anomalous presentations which by irritation affect mentality.

From the standpoint of injury, occurring in this existence mental perversion may be caused by: (1) injury to the skull or skeletal body during gestation, or at birth, in such way as to react upon that part of the cortex in which mind should be produced to such distortion that normal mentality is not produced; or (2) injury to the skull whereby its plates are indented and press upon portions of the cortex may change the process of such cortical areas, in such manner that normal mentality cannot be produced; or (3) subluxation resulting in occlusion of nerves to cortical areas of the brain which have the function of producing mind, may serve to produce perverted mentality; or (4) accumulations of poisons within the body which chronically titillate the terminals of nerves, causing motor reaction to cortical areas, in which mind should be produced may produce mental perversion; or (5) intemperate indulgence in food, beverages, drugs, especially narcotics, venery, and so on, by the irritations produced, may react upon mental cortical areas to the

perversion of mental function; and last, but by no means least, (6) the irritation from anomalous orifices, particularly those of the feetward aspect of the body, frequently react upon cortical areas in which mind should be produced, to such an extent as to produce profound mental perversion.

It will be observed that all of the characters of injury herein mentioned have in a general way been discussed as incident to other phases of pathology and symptomology, and those which have not had full discussion in the two volumes of this work will be found quite fully discussed in " Psycho-Bio-Physiology," the first volume of this series.

The human family is just beginning to understand that mental perversion is really a phase of disease, and to a large extent is capable of restoration, indeed almost completely so, except as to its definite hereditary phases, and even in such cases much can be done in the way of evolution in several generations.

EMOTIONAL PERVERSION

It is when the subject under discussion is turned to the thought of emotions, that it takes on its most awesome aspect, for it is through distorted emotions that perversion is made horrible.

From the technical standpoint, emotional perversion exists when the usual and ordinary expression is presented in the reverse, or in a divergence from the normal that amounts to a contrary expression.

For instance, society conceives that emotion is circumscribed to love, affection, friendship, sympathy, tenderness, compassion, adoration, jealousy, hate, and

so on. Of course, this is in no sense true, but it is the scope within which discussion of these subjects is confined.

Therefore, it is conceived that there is emotional perversion when, without the ordinary reasons for it, love is turned to hate, sympathy to harshness and inconsideration, affection to coldness, friendship to suspicion, tenderness to cruelty, compassion to contempt, adoration to dread and adversity, jealousy to friendship or love, and hate to sympathy or affection, and so forth.

In this connection it will be observed that the difficulty of applying sympathy to victims of such distempers is, that there is no line of demarcation, and it is not known until the phases become very pronounced who are emotional perverts, and who are not. But here again humans stand ready, upon observing anything unusual in the emotional expression of a person to fling the epithet "Pervert!" without waiting to learn the truth.

It should be remembered that the evolution of the human family necessitates a very wide range of unusual, emotional expression, for in thinking new thoughts, and developing new mental functioning, many strange, unusual and new emotions must be endured and expressed, and knowing these facts human beings should exercise an exceptional charity toward all, for in doing so no one knows but what he is extending charity to himself.

Emotional perversion is incident to the effects of all character of distortions, which are detailed under the preceding subtitle, and should be carefully reviewed in connection with what has been said here.

SEXUAL PERVERSION

The student capable of careful thought will have observed that since sex expression is nothing but emotion, that the preceding subtitle really comprehends this discussion.

However, since the human family has had the custom of considering sexuality as though it were a thing existing entirely by itself, and as though it were a department of emotion sustaining no definite relation to other phases, that idiosyncrasy will be here indulged, and unusual sex expression will be discussed quite by itself.

However, in discussing sex perversion by itself, it must be remembered that the emotion of sex bears an inseparable relation to the emotions of mentality. That is to say, the emotion of sex cannot be separated from love, affection, sympathy, tenderness, compassion, adoration, jealousy, construction, destruction, and the like.

It is a well established fact that love cannot exist without sex emotion; that friendship is a phase of love, and receives its underlying strength from sex emotion. Sympathy, tenderness and compassion are directly related to the emotion of sex; jealousy and hate profoundly react, not only upon sex emotion, but on sex capacity.

Sex perversion exists not only when usual and ordinary sexual expression is not presented, but sex emotion is exhibited in unusual and extraordinary ways.

It is presumed and accepted as a matter of course, that any normal child at the age of puberty shall gradually come into the consciousness of the existence

of sex emotion, and sex appetite, which is usually expressed, in refined and delicate phraseology, as the longing for, and love of, a mate; the actual fact being that the sex organs, and the corresponding cortical areas develop, concomitantly resulting in the desire and ability to use the sex organs in the act of procreation.

It is to be profoundly regretted that humanity generally refuses to take time to form a just comprehension and appreciation of the actual sex situation, and, therefore, looks upon sex emotion as something untoward, bestial, and common; when it is the prime emotion from the soul, and is most nearly connected with the constructive influences of God—or the Force and Intelligence which controls our earth, which we call the universe.

If a sympathetic and intelligent consideration of the sex emotion would be extended by the whole human family, much sex perversion could be prevented, and a very remarkable evolution, not now attained would be accomplished.

Sex perversion results from one of four characteristic tissue situations: (1) It may be the result of adverse heredity; (2) adverse congenital conditions; (3) injuries occurring in this life experience; and (4) anomalous sex organ formation.

(1) Sex perversion as the result of heredity may occur in two ways: (a) by the perpetuation of adverse tissue tendencies, superinduced by injuries or anomalous conditions, or adverse heredity, in parents; and (b) by the propagation of offspring by those too near akin; such for instance, as uncle and niece, aunt and nephew, double first cousins, or which is almost unthinkable,

propagation between mother and son, or father and daughter.

In all the history of the past we find that propagation of children by such incestuous relationships has been countenanced quite generally, but has reached its most notable examples in the ruling families of the world, which, by reason thereof, have usually become degenerates—the only thing saving such families from extinction being an occasional introduction of plebeian blood.

The reason incestuous production of offspring is likely to result in sex perversion is because the chemistry of both parents is too similar to give to the child a sufficiently wide chemical formula to result in complete tissue equilibrium, and, therefore, many times a brain cortex is constructed that does not give to the offspring the capacity for normal sex emotion.

(2) Congenital injury, which results in a failure to produce normal brain structures, many times results in the lack of capacity to experience normal sex emotion, but emotion of a type called sexual perversion.

(3) Tissue injuries, resulting from all characters of excesses, such as overindulgence in eating; the use of alcoholic beverages; the use of drugs, especially narcotics; and just plain traumatic injury, frequently present such interference with the transmission of nerve stimulus as to produce cortical degeneracy or lack of brain equilibrium to such an extent, that sex emotion is changed from its normal expression so completely as to be sex perversion.

It would be of considerable value if a somewhat extended discussion of this matter could be here indulged, but it must be remembered that substantially

all of these phases have been carefully dealt with under other titles in this work, and that complete preparation for an understanding of the subject matter here presented will be obtained by a careful review of all characters of distortion, and their direct brain effects, for, of course, sex perversion springs directly from brain conditions.

(4) The most pronounced and remarkable phases of sex perversion, however, are those which spring directly from brain influences, superinduced by anomalously formed sex organs; the adverse and unusual titillation of which directly react upon the brain, giving rise to unusual and sometimes almost unexplainable emotions.

In the particular phase now directly under discussion, the anomalies described in Chapter III of this work, are the ones particularly referred to, and the student should make a very careful review of that chapter in order that he may fully comprehend what is here stated.

In this phase of the subject, all conduct on the part of human beings that does not conform to the usual and ordinary in the gratification of sex emotion, is classified as sex perversion, and in a general way these are masturbation, onanism, Sodomy—buggery, pederasty, cunnilingus, fellatorism—irrumation, and the use of other parts of the body as sex organs.

Masturbation is usually defined to be the arousement of the sex emotion, and the production of an orgasm by the intervention of other means than that of the preparatory emotional relation between male and female, succeeded to by usual and ordinary copulation.

It will be seen that this subject is very closely related

to mentality, and that it is very difficult to draw the line of demarcation as to just when normal and usual, emotional provocation is used, and when such provocation is perverted. It is also quite as difficult to determine when normal sex indulgence has resulted, and when it has not, for these matters are very largely determined by mental attitude.

There is a very great divergence of thought upon this subject in the human family. Some authors contend, for instance, that the normal young male has seminal emission about once a week without any unusual sex excitation, or sexual relation, while others maintain that normally no sex emotion should occur except when aroused by the opposite sex, and that no seminal emission should occur except as the result of copulation.

It seems that the golden medium should lie somewhere between these two opponent attitudes, and that while the virile young male may undergo dream-like emotion, and orgasm, this situation can hardly be classified as normal, although such incidental emotionization certainly cannot be classified as sex perversion, and yet such conduct would only have to go to the point of overcoming the resistance of certain brain tissue of the organism involved, to become perversion.

Clearly, however, masturbation occurs when the individual adopts means that are wholly within himself for the arousement of sex emotion, and the gratification thereof to the extent of an orgasm. An occasional indulgence of this character would not constitute perversion, but habitual conduct of the kind described would overcome brain resistance and mental control and become a damaging type of perversion.

The symptoms of perversion by masturbation is paramountly a dislike or dread of the opposite sex. Victims of the habit dread social relations with their opposites, and indeed with those of their own sex.

Where this perversion is pronounced, the victims of it desire to be alone, and dread any sort of company. This attitude on the part of a person, however, is not sure proof, and should not be indulged too far, because the same attitude is frequently presented by those in whom it in no sense is caused by masturbation.

In the young male or female, masturbating before puberty, is usually indicated by changes in the sex organs. In the male the disposition to erection upon any kind of titillation of the penis, or the nerves of the pubis relative to it, together with the unusual development of the organ, and its prolonged sustenance of tumescence, may be relied upon as strong indications, which are accessorily sustained by the disposition of the subject, under any excitation, to put the hands upon the penis without consciousness of the act.

In the female before puberty, a close and careful study of the tissues of the vulva will usually disclose the distortions incident to the character of manipulation used to arouse emotion, and to secure the orgasm. These are usually the distention and congestion of the labia minora in the region of the clitoris, and from the clitoris to the vaginal orifice. Rupture of the hymen and the development of the vagina adds much to this evidence. Here again the arousement of sexual emotion by titillation of the parts is a very controlling symptom.

There really is no positive evidence of masturbation that is completely reliable in either the male or the

female after puberty, and yet what has already been said will continue to be strong evidence, if sustained by relative situations and conduct. After puberty the female's distrust and reluctance to be in the company of the opposite sex, especially of those near her own age, or to be in the company of older persons, is, when taken in connection with the other symptoms mentioned a strong indication.

In this connection it is well to remember that at times, substantially all males and females, under our present modern situation, that are of anything like normal virility, masturbate at least to some extent, but as has already been said, it is the habit and not the incidental case that produces perversion.

Onanism refers to that character of copulation, in which, at the time of the orgasm of the male, he withdraws the penis from the vagina so that the seminal discharge does not occur within the sex organs of the female. This method of masturbation is described and named in the Bible.

There are no definite symptoms of onanism, but men and women who practise this system of masturbation are both in time, seriously injured by it; the man, of course, much more than the woman, for with him it is a positive masturbation of the most injurious type, and to a considerable extent it is the same thing with the woman.

Sodomy—buggery, is the perversion of the sex relation by using the anus as a sex organ. This unspeakable thing may occur between men and women, or between men.

It is almost unbelievable, but, because of perverted sex emotion, incident to anomalous sex orifices, it some-

times results that the woman's focus of sex attention is at the anus instead of the clitoris and vagina as it should be. Many women in this condition will try to induce buggery of them instead of intercourse, for they get no gratification except by the perverted method. The only symptom of this habit is the sex anomaly and wrong focus of attention referred to, and a loss of refinement toward the sex relation.

One of the most remarkable, and almost unbelievable things in connection with anomalous sex orifices is the immediate change in the focus of sex attention when for instance, it has been at the anus, by the release of a hooded clitoris. The author has directed the orificial correction of many cases, in which the focus of attention was at the anus; with no sex response at the clitoris or vagina, the clitoris being completely hooded, and has seen the focus of attention completely change while the patient was under the anesthetic, and within two minutes after the clitoris was released.

In connection with the statement in the last paragraph, the author wishes it understood that when so small a correction as the unhooding of the clitoris has the possibility of removing from a woman the degradation and mental perversion of desiring buggery of herself, rather than normal, sex commerce, he feels that students should know more of this work, and that the human family needs enlightenment as to the sex parts more than all other subjects put together.

Pederasty is a word indicating the perversion of men so that they desire the use of boys, by the anus for sex indulgence, instead of the female in the usual and ordinary way. People generally have no idea of the

extent to which this prevails, and they have no idea of the character of persons who fall into the clutches of this horrible conduct.

The author recalls an experience of his boyhood in which a minister of the Gospel, who was a widower, formed his acquaintance on a train when he was going away to school; found that he changed cars in his home town, invited him to his house to stay over night, and at bed time it developed that his one purpose was to secure that unspeakable relation. Of course, he failed, but the tragedy of that occasion will always remain fresh and vivid in memory.

Cunnilingus is the name given to that perversion, in which the victims have formed the habit of using the tongue in the vulva and vagina to produce sex emotion and orgasm. This unspeakable conduct is engaged in by both males and females.

Women perform this perversion upon each other, and these habits are very much encouraged when women or girls are long together, and when no males are permitted in their social relation. It is of the first importance in institutions of all kinds for girls and women that all inmates shall be carefully watched in order to make sure that no such habits shall be formed.

Women perverts of this type usually much prefer that men shall perform this perversion for them. It must be understood that no woman would submit herself to this character of sensual exercise who was not a victim of irritation from anomalously formed sex organs.

Fellatorism—irrumation is another phase of perversion which is as sickening and disgusting as the one just

mentioned, and that is the application of the mouth, as though it was the vagina, to the penis. This grotesque and damaging conduct is engaged in by both men and women victims.

Men, who because of anomalous sex construction, are addicted to perversion, sometimes form the habit of performing this office for each other. The danger of forming such habits is greatly increased among boys and men wholly sequestered from the society of women, and its prevention must be closely watched, where boys or men are for a long time confined and associated together.

Men of this perversion have a peculiar desire to secure women to perform this office for them, and they are successful more often than would ordinarily be thought possible in getting women who are anomalous as to their sex organs to learn this destructive habit.

The two characters of perversion just discussed maintain with a great deal more frequency than society generally suspects. It is very common in places of prostitution, and is practised by its victims in a social way. It even invades the sanctity of the marriage relation.

The simplest phase of this most obnoxious habit in marriage is where the husband and wife voluntarily enter into it. Husbands who are victims of the irritation of anomalous sex formation, have been known to compel wives to do this unspeakable thing for them. Wives of the anomalous type have left husbands, because they would not allow them to practise fellatorism on their husbands.

One of the pronounced symptoms of this perversion is the inability of the addict to perform sex relation in

the normal way. Other symptoms are the remarkable changes that take place in the physical being.

A man who is a cunnilinguist or a fellatorist, commonly known as " a header," becomes effeminate, and in his general conduct including the voice, affects the mannerisms of women. In his mannerisms he becomes what is ordinarily called a " sissie," and loses the bold, positive, aggressiveness of the male.

The woman who is a pervert of either of the types mentioned in the last paragraph makes still more marked changes, by becoming coarse and masculine; losing all of the finer sensibilities that are usually so generously expressed in the conduct of the female; losing all of the coyness of feminine traits, and becoming vulgar, obscene and garrulous, and this includes the voice, which loses its feminine tones, drops in pitch, and becomes raspy and harsh.

The author, in his researches to ascertain the facts of sex anomaly, examined not less than three hundred prostitutes, many of whom were perverts of the character immediately under discussion, and he never found a prostitute who did not present anomalous sex orifices, and has never observed a pervert, although he has examined many of them, who was not in like manner afflicted, and, therefore, feels prepared to say, and does say, that the perversions discussed in this chapter would not occur, if it was not for the irritation and, therefore, the abnormal emotion aroused by anomalously formed sex organs and orifices.

It is impossible to close this chapter without saying that the one, paramount study of doctors should be, the general effects that sex anomaly has upon the

emotional attitude, because the distortion and disease resulting from these phases of pathology are incident to the production, not only of all these unspeakable social disorders, but are peculiarly related to the continuance of venereal abnormality, insanity, blindness, deafness and all other phases of disease, not to mention the influence that such anomalous conditions have upon the officers of governments, and, therefore, upon the peace of the world.

CHAPTER L

UNUSUAL TISSUE CHANGES

Cancer—Tumor

The phases of abnormality to be discussed are described by the latest therapeutic dictionaries as being "a malignant tumor, made up chiefly of epithelial cells."

Tumor is described by the same authors as being, first, "a swelling, a morbid enlargement;" and second, "a neoplasm—a mass of new tissue which persists and grows independently of its surrounding structures and which has no physiologic use."

It will be seen by the definitions quoted that there is really, from the therapeutic standpoint, no well defined demarcation between cancers and tumors. It, however, is of the first importance that these phases of abnormality shall be carefully distinguished, not because to distinguish them aids any in overcoming them, but a knowledge of their difference will aid the student materially in arriving at a proper solution of the situations, which superinduce either phase.

CANCER

Cancer is a phase of disease which occurs concomitant with a proliferation of coarse, gross or giant-cell productions.

It is not at all necessary that these cells shall be epithelial, except in the sense that all cells are in a

measure epithelial. That is to say, there is a therapeutic assumption that all cells proliferate upon a basement membrane. This, however, is a novelty aside from the fact.

From the Chiropractic standpoint, then, a cancer is a proliferation of cells, occurring anywhere in the body, as the result of occlusion of nerve stimulus to the area, which results in a lowered and coarsened vibration and, therefore, in the assimulation of a loose and granular tissue out of the morbid matter retained in the area.

The paramount fact which distinguishes a cancer from a tumor is that a cancer is a tissue composition of a pathologic character, while a tumor represents some phase of disintegration of tissue.

Cancers are of two definite characters: (1) fibrous; and (2) cellular.

Of course, it must be understood that a fibrous cancer is also cellular, but the distinguishing feature of it is that the cells are arranged in a trabecular network, and are parallel to each other in such manner as to produce a fibrous result. The novelty, cellular cancers, exist when there is a proliferation of coarse, loose, granular, or giant-cell formations not arranged in such manner as to be in fibers.

Cancers are therapeutically classified as: (1) malignant; and (2) passive.

That which distinguishes a malignant cancer primarily is the fact that it continues to enlarge. Of course, from the therapeutic standpoint the cancer is accredited with a certain inherent ability to grow, which, of course, it must be understood is a fallacy.

What the therapeutic world calls a malignant cancer,

from the Chiropractic standpoint, is a structural growth, caused by profound occlusion of nerves to the area, resulting in a precipitation of matter of the right chemical consistence to enter into that characteristic structure, and, of course, so long as that formula is produced in that area, and occlusion is not removed, the so-called cancer continues to grow as it were by accretion.

A passive cancer, speaking from the therapeutic sense, is malignant for a time, and then ceases its malignancy, and has been conceived to have attained its full size, and remains at that size negatively, or inactively.

The Chiropractic explanation of the passive cancer is that the general constitutional pathology has changed so that there ceases to be precipitated, in the cancer area, the chemical formula necessary to its further growth or addition to its size.

The therapeutic world has gone into a multitudinous classification of cancers, which do not assist much in an understanding of the situation. The primary designations are: (1) carcinoma; and (2) sarcoma, and after this attempt to differentiate, therapy has made the unaccountable error of practically merging them, so that it is impossible to tell what character of pathology either of the words is intended to indicate.

In fairness it must be admitted that there has been some effort to classify a carcinoma as a malignant cancer of epithelial origin, while it has been sought to describe a sarcoma as a cancer made up of cells that have a physical resemblance to those found in the embryonic, connective tissue. In the description of

these structures it is declared that, by the proliferation of the cells of the intercellular substance they become granular, fibrillary or reticular, which brings the definition back to that of carcinoma.

It is impossible to demonstrate sarcoma, and account ror its existence from the standpoint of embryonic, connective tissue, therefore, no classification under sarcoma will be made. The descriptions occurring directly under carcinoma may be classified as follows:

(1) *Histology*—that is, simple carcinoma in connective tissue. Under this classification comes fibroma, both hard and soft; myoma, occurring in muscle tissue; hemangioma, of blood vessels; lymphangioma, of lymph vessels; lymphoma, of lymph glands or tissue; endothelioma, in endothelial membranes.

(2) *Epithelioma*—neuroma, occurring in nerve tissue; adenoma, in lymphoid structures; hypernephroma, in glandular cells. The student must understand that there are characters of the phases of pathology just named that therapy claims should be classified under sarcoma, but no substantial evidence has been presented to sustain the claim.

It is not pretended that all of the characters of cancer that therapy has presented are given here, but all of the characters that are well differentiated, and generally observed, are mentioned. Of course, in addition to these there could be added epithelioma, a cancer of the skin, and chondroma, one occurring in cartilage.

TUMOR

Tumors present a more definite character of formation than cancers, in that instead of presenting a strange and

characteristic tissue formation, they more nearly conform to what has ordinarily been called abscess, and always consist in a breaking down of the general characteristic formation of the tissue of the area in which they occur. In other words, tumors tend to the production of cavities within their interiors containing disintegrated morbidity, while cancers do not.

Tumors occur in a very much wider range of tissue than cancers, and it has been in this particular that the therapeutic world has introduced the most confusion between these phases of pathology. It may serve a good purpose to give a partial classification of tumors herewith.

Histologic lymphoma, occurring in fatty tissue; myxoma, in mucous tissue; osteoma, in bone tissue; glioma, in neuroglia; myoma, in muscle tissue; lymphoma, in lymph glands and lymph tissues; and endothelioma, in epithelium, which, of course, includes all of the tumors that occur in the squamous, columnar, and any kind of epithelium. Of course, lymphoma includes all characters of adenoid and other lymphoid tissues.

In addition to the list given, there is one character of pathologic result that might be classified as a mixture between a tumor and a cyst, these are dermoids, teratomas and cholesteatomas. These really do not present a differentiation of sufficient value to be discussed separately, for they are completely included under cysts.

Cysts are tumors which have undergone a very extensive disintegration of their interiors, so that there is contained within the connective tissue wall, which is

always lined with endothelium, morbid colloid. This may be classified as being serous, mucous, or purulent, depending upon the degree of disintegration and chemical change.

For the purpose of clarity some of these incidental structures should have just a little further notice; *Fibroma* is a connective tissue cancer, and may be of either the hard or soft variety.They are generally pale in color, round or lobulated, and are walled off or incapsulated.

Lipoma is a fatty tumor; is nearly always roughly circular, lobulated and yellow, and is enclosed in a well defined capsule. These are sometimes not quite correctly referred to as sebaceous tumors, although the line of demarcation between the two is indeed very difficult to distinguish. However, in the fatty tumor the lobulations have broken down, while in the lipoma they still remain intact.

Osteoma is a tumor or necrosis of the bone. These frequently occur as a result of bruises of the periosteum, and frequently occur incident to occlusion superinduced by the distortion of joints. Such conditions are frequent in the shoulder as a result of displacement of the head of the humerus occluding nerves and trunks of the brachial plexus.

Neuroma is a cancer occurring in nerve tissue or ganglia in which there is a peculiar giant-cell production, and a fimbriated growth. This many times occurs as a result of distortions whereby nerves to a certain area are gravely occluded. Or neuroma may be tumor in a nerve area, as a result of precipitation of toxins superinducing the disintegration of nerve trunks or ganglia.

The author feels that any attempt at further classification in the present state of the knowledge of cancers and tumors would be futile, and would more particularly serve to confuse than to instruct. Therefore, attention will be turned to a discussion of the cause and the correction, instead of further classification.

Cancers and tumors are caused by occlusion of nerve stimulus to the area where they occur, but it must be understood that cancers and tumors do not always occur because nerve stimulus is occluded. The reason, then, that cancers and tumors sometimes result must be pointed out.

It would be impossible for a cancer or tumor to occur in the organism if certain, constitutional, pathologic conditions did not exist, and the student must understand that these pathologic conditions must be as numerous as the different characters of cancers and tumors that are produced.

Primarily the condition incident to the production of a cancer, or tumor in a general acidosis, but, however, this acidosis must be of a particular and specific type, and must occur in the body of a person that has also marked occlusion to certain areas in order that the acid colloid congests in such areas, and precipitates therein, furnishing the substance of the right chemistry to enter into the pathologic transformations.

When the conditions just outlined have occurred, cancer in the area begins as a steady change in the tissue elements of whatever kind involved. If, during the process the constitutional acidosis, should sufficiently change for the better, the cancer ceases development and is said to have become benign.

If, however, the acidosis remains and gradually grows worse, producing the necessary adverse, chemical formula, the cancer continues to grow, and is classified as being malignant.

If the constitutional acidosis is of a different, but of exactly the right character to produce such a result, the colloid precipitated, at first results in the production of enlarged structure, which will undergo congestion, inflammation, etc., finally entering into pathologic disintegration, in its interior, presenting the true phases of tumor.

The tumor just described will go on enlarging so long as the colloid of the general acidosis is of the character to add to it, and not to result in too rapid disintegration; but, if during the process, the general acidosis markedly changes, further enlargement of the tumor may cease, and it may undergo rapid degeneration, and thus entirely disappear.

In the situation last described, the tumor may be transformed into a cyst, and as such may undergo almost any amount of enlargement.

From these remarks, it will be seen that the paramount necessity to stop the growth of cancers and tumors is to correct the general acidosis of the organism. If this can be done, no matter what the character of the cancer or tumor, its growth will be stopped, and it will undergo a process of disintegration, which will be rapid or slow, depending upon the character of acidosis that has existed, and the density and resistance of the tissue changes that have resulted.

Under the application of the principles of Chiropractic, the constitutional acidosis resulting in cancers

and tumors may generally be rapidly overcome, and in a majority of cases, cancers and tumors may be almost at once stopped in their growth, and in a very large per cent of cases may be caused to enter upon a progressive disintegration and depuration until they completely disappear.

However the Chiropractor in attempting to remove cancers and tumors meets with a series of difficulties which sometimes renders it impossible for him to secure results.

For instance, there may be such intra-pressures, resulting from the occupancy of the cancer or tumor, that the irritation and motor reaction will be so great that occlusion to the area cannot be reduced. In such an event the last recourse has been reached, and the cancer or tumor must be extirpated.

It must also be remembered that where intra-pressures are not as great as that described, still the cancer or tumor may be pressing upon a viscus, preventing its function, and producing profound motor reaction, or pressing upon a ganglion, or upon ganglia, or even upon large nerve trunks in such manner as to not only occlude the nerves extending through such areas, but to produce such profound motor reaction as to render release of occlusion to the pathologic growth impossible.

The author has removed many cancers and tumors by the application of the principles of Chiropractic. These have been in different parts of the body—stomach, intestine, bladder, uterus, etc., and he has had reports from hundreds of other cases, so that he knows recovery in many cases can be accomplished.

However, too much must not be expected. Cancers

and tumors that have existed for many years, and have been maintained incident to a chronic acidosis until the general organism is greatly deficient and negative, are, of course, most difficult to remove, because the constitutional pathology is most difficult to remove, but a very large per cent of cancers and tumors may be stopped in their growth and wholly removed.

When the human family understands the relation of diet, clothing, housing, bathing, ventilation, etc., to cancer and tumors it is certain that much greater results will be obtained by the application of the principles of Chiropractic than is now possible.

Relating to check the growth of cancers and tumors, and to secure their disintegration and depuration, is, of course, primarily directed to overcoming the general acidosis which has made their existence possible.

Therefore, these are specifically the four avenues of depuration, and incidentally, the large glands of the body generally, and these, of course, in connection with the application of all general health laws, to secure the best constitutional condition possible; and then to specifically release occlusion of stimulus in the nerves extending to the area of the cancer or tumor.

It must be understood by the student and practitioner that to remove a cancer or tumor of any length of standing, close and careful application of the principles of Chiropractic for months will be required, and even if during the first few weeks there seems to be little or no response, still the application of one relating each day should proceed with great regularity, this should be accompanied by the rigid enforcement of the strictest regime of living and care on the part of the patient.

CHAPTER LI

CONSUMPTION—TUBERCULOSIS

Consumption is an adverse tissue condition and functional process that is too comprehensive to be discussed in relation with tissue abnormality of any organ of the body. It can only be discussed properly when the whole body is under consideration.

Consumption is involved in every phase of tissue degeneration that results in a lessening of tissue, and indeed some phases of consumption are involved in those phases of tissue abnormality in which tissues are enlarged.

The process of consumption, however, is more perfectly adapted to those of dropsy and such disintegratory processes as diabetes, the advanced stage of Bright's Disease, the conditions incident to syphilis, and to suppuration in tumors, carbuncles, abscesses, etc. Indeed, it is the degenerative process in tissue wherever found or observed.

Therapeutists have been guilty of the error of speaking of consumption of the brain, vertebral cord, intestine, bones, etc., and while all of these phases occur, it is wholly unadvisable to apply this name to the process.

Consumption has been called the "Great White Plague," and it has been widely advertised that consumption destroys more people every year than all other "diseases" put together, and because of these statements a very widespread, inconsiderate, and non-

intelligent fear of consumption has been instilled into the public mind.

It is true that consumption does destroy the lives of more people every year than all other phases of abnormality, because consumption is a part of all other phases of abnormality, and for that reason alone, the process occurring by itself, causes the death of a very inconsiderable number compared with that of other phases of abnormality.

In this view of the subject it is entirely unjustifiable and never necessary for the diagnostician to state that an individual is suffering from consumption or tuberculosis; because in the first place there actually is not "a disease," and in the second place no aid could come from announcing it if there were, and to declare that a shifting process is a thing, so deadly as people generally think consumption to be, is almost criminal as coming within the law against manslaughter.

Consumption occurs in two general phases, the first of which has been to some extent considered herein, and is a general, disintegratory, wasting process; the second is a process of degeneration, by which tubercles of morbidity are produced, followed by the breaking down and disintegration of those tubercles; the phase being called tuberculosis.

Tuberculosis may occur in any tissue of the body. There is tuberculosis of the liver, spleen, pancreas, lungs, brain and so on.

The lungs being the respiratory organs, and, therefore, highly involved in the process of furnishing active material to the body to maintain its vitality, present the most pronouncedly adverse conditions under the

process called tuberculosis, and it is for this reason that, when consumption or tuberculosis is mentioned, that thought is usually directed to the lungs. It has been seen that this is not necessarily true, but, nevertheless, it is a fact that produces gravely adverse effects upon the human family.

When occlusion of stimulus in nerves to the lungs is sufficiently grave and the tissue tendency, whether hereditary or otherwise, is sufficiently adverse, stases are formed in the parenchyma of the lungs, and these are centers for the retention of disintegrate lung tissue, which accumulates, producing tubercles or nodules of morbid matter.

After a time occlusion of the nerves to certain areas is so nearly complete that the condition necessary for animation in the tubercles ceases to exist, and they begin a progressive disintegration or decay. At this stage, here, as elsewhere, scavenger germs come into existence, and aid in the process of morbid disintegration.

At the time the tubercles begin to decay, they and the germs that evolve in them are toxins, the effect being that they become centers of intense irritation, not only by reason of the activity of the germs, but because the toxins escape through the vessels of transportation, by osmosis, and irritate widely.

The composite effect of this irritation is intense motor reaction and columnar constriction throughout the whole thoracic and cervical regions, producing widespread and intense occlusion to the whole lung tissue, resulting in an elevated temperature, which may range very high. At this stage the negative phase of the affirmative process becomes very pronounced.

Therapeutists think the germs that aid in disintegrating tubercles, in the lungs and other tissues are the cause of tuberculosis. It will be seen that such a proposition is wholly without any facts to sustain it, and is getting the cart decidedly before the horse, for, of course, the tubercles produce the germs and not the germs the tubercles.

The so-called *bacillus tuberculosis* could not exist if it were not for the tubercles. The tubercles could not come into being without the process of consumption, the process of consumption could not exist if the ultimates of tissue construction were not disturbed and particularly those phases which relate to an increased disintegration of cells with lessened depuration. The conditions enumerated could not exist if liquid transportation were normal, and it would be normal if there was no occlusion of stimulus in nerves to the areas involved. Occlusion of stimulus, therefore, is the incipient cause of tuberculosis.

In this view of the case it will be seen that so far from being the cause of tuberculosis; the tubercle germ is only an incident to it and an incident occurring far along in the adverse process, and not until after the tubercles have formed and have begun progressive decay, which is ordinarily referred to as the "softening of the tubercles."

Consumption, so far from being a romantic disease; calling for sympathy from the friends of the afflicted, is a disgrace, and is an indictment against the human family, so grave and far reaching that it should cause a blush of shame to mantle the cheek of every fair minded person.

The animals in the jungle, living as it were in the heart of the hand of the Creator, conforming their lives to the laws of nature, by instinct, never suffer from this process of degeneracy.

No savage peoples have ever been found that were suffering from the process of degeneracy, called consumption or tuberculosis.

To the utter shame of members of the social fabric, however, it must be said, that when animals of the jungles and savages of the human race are brought into near association with civilized man and compelled, in certain measures, to adopt his mode of life, they become subject to this adverse process.

Tuberculosis has been found active in rabbits, sheep and cattle of the domesticated variety, and the more completely rabbits, sheep, cattle and so on are compelled to live like civilized human beings, the more completely they become the subject of this adverse process.

To be free from the adverse process of consumption or tuberculosis, the human family cannot go back to savagery, but by careful study and thought, it can ascertain what particular errors, of the conduct of civilized life, produce these deleterious and far reaching effects and can correct those errors in habits and conditions.

The change from savage to civilized life, with respect to the substances used for food, their selection, combination, preparation and eating, are prime factors in the adverse conduct under discussion.

The methods of dressing, housing, and heating are elements worthy of the most profound consideration; but most profound and important of all are the irrita-

tions and excitements incident to social life, the damaging influences of adverse marriage, and improper sex relation in connection therewith; to say nothing of excessive and adverse sex relation in other respects, these are the paramountly adverse phases peculiarly provocative of these adverse processes.

These and many other adverse habits, that may be mentioned, while they have marked the pathway to our boasted intelligence and civilization have also directed us into the pathway of our degeneracy, until from a condition of health and strength in our pristine days of savagery we have now become a race of degenerates.

It is, of course, understood that long continued phases of tissue degeneracy, under occlusion of nerve stimulus incident to adverse conduct occurred before the abnormal tissue conditions were produced that made consumption or tuberculosis a possibility.

To remove the plague of consumption, and this, of course, includes all phases of functional abnormality, will necessitate a return to the harmony of conditions that preceded civilization. This has been variously characterized as "a return to the simple life," a "getting back to nature," etc. These, however, are nice sounding phrases substantially without meaning.

It is the problem of this age to devise a conduct that will tend in the right direction, physically and mentally and at the same time will retain all of the advantages of civilization.

It is not the purpose of this chapter to outline such a reformation, but merely to point out that to arrive at the desired goal—health, attention must be primarily

directed to the following subjects and in the order named: ingestion, digestion, heating, clothing, aeration, depurtion, mode of dwelling, and especially to marriage and sex relation.

Pending such a revolution, however, it will be found that in the majority of cases, conformity to proper rules in diet, dwelling, clothing, ventilation and depuration, together with sexual abstemiousness, aided by proper relatings will remove the process called consumption or tuberculosis and secure function that approximates the normal.

In many cases degeneracy has advanced so far, in vital organs, that the function which of necessity must be performed by them cannot be accomplished, even pending restoration. In such cases, the process must result fatally, and this must be true and is a condition that must be met with frequently, until the reformations herein suggested have been accomplished, to an appreciable extent, and the difficulty will not be wholly overcome, until our physical and mental conditions have evolved to a parity with those which exist among savage peoples.

Relating to remove occlusion in consumption is of such a general nature that no specific rule can be laid down. It will be found that all of the organs of the body are abnormal, many of them gravely so. The Chiropractor will begin by relating at places where there is gravest occlusion, and that will be especially true, if the nerves from those places extend to vital centers, and will thus progress until the tissues of the body have evolved and regenerated to such an extent that the general bodily processes again approximate the normal.

CHAPTER LII

INSANITY

The therapeutists have for a long time classified certain phases of abnormality as "nervous diseases;" by this classification intending to distinguish them from "diseases" to which they have given names.

From the basis of Chiropractic all phases of disease are "nervous," to again use the therapeutic term. That is to say, are the result of interference with the receipt, transmission and application of nerve stimulus.

To the Chiropractor, the difference in phases of disease depends upon the organs affected, and the characteristic way in which they are affected, and the relation of such effect to the whole organism. That is to say, liver abnormality, kidney abnormality, etc., are peculiar and distinct phases from their immediate and constitutional aspects, because of the distinctively different functions of these organs both immediately and remotely.

Insanity is a name which therapeutists have given to characteristic mental or mind abnormality. The word so used is not sufficiently comprehensive for the purpose they seek to make it accomplish.

The word insanity simply means unsound, and of course applies to any phase of unsoundness of the whole human organism, and not to any one particular part of it.

It has been laid down as a fundamental proposition in the pathologic department of this work that

pathology of the brain and general organism are exactly equal, because of the inter-relation that exists between them, and for elucidation of that proposition, the student is here referred to Chapter XVII of the first volume of this work.

It is the therapeutic and ordinary conception that insanity is a disease of the mind. But reflection upon the matter will make it clearly appear that mind is a function of the physical brain, and that it is impossible that there could be such a thing as disease of a function. Disease cannot occur to an immaterial operation which has only been named for convenience, such as mind.

Mind is a name given by the human family, to the result of the function of the physical brain within a certain scope and relation.

It is perfectly clear that a function may be abnormally performed, and that if it is abnormally performed it is so because the organs, segments or parts involved in its performance are so abnormal that their conduct fails to co-ordinate in the rhythmic and regular production of that function.

By way of illustrating the last statement, if nerves ramifying the heart are occluded, and incidentally certain acids have accumulated in the tissues of the heart, the result will be palpitation of the heart. Now, palpitation of the heart is not a thing. It is just a name given to that adverse, non-rhythmic performance of the heart.

In the same way, and for the same reason, insanity is the expression of an abnormal tissue condition of the brain, or of abnormal tissue conditions of the brain, and the gravity of mental unsoundness, if it could be

appraised, would be a direct criterion to the actual, adverse tissue condition of the brain.

The remarkable situation that is confronted in an attempt to discuss insanity appears in the fact that there is no standard of sanity. This is not different than the discussion of any other phase of abnormality, for, of course, there is no standard of normality, but in the ordinary the proposition is not so poignantly remarkable, for in all other respects we attempt to use mentality in a discussion of phases of abnormality; but the situation becomes disconcerting when an attempt is made to discuss insanity through the process of mentality, when the mind conducting the discussion knows perfectly well that there is no standard of sanity and therefore, no way to positively deduce insanity.

The situation indicated in the last paragraph would be mirth-provoking if it were not so desperately serious. Here we have the peculiar paradox; mind that has no way of knowing that it is sane, attempting to lay down rules by which to test the sanity or insanity of other minds.

We are saved from too great embarrassment in the situation just referred to by the actual situations that go with a discussion of sanity or insanity; for it is presumed that a person is sane if the minding function of his brain produces mentality which conforms to the usual and ordinary.

The dread consequent of this situation, however, is that if the brain of a person functions to the production of mind, the attributes of which do not fall within the scope of the usual and ordinary, he is said to be of

unsound mind, or of weak mind and either of these conclusions may be wholly wrong.

It is because of this general conception that persons of profound mentality of an unusual type are so frequently looked upon by people of ordinary mental capacity as being insane. This is so true that even statements of truth made by those possessing unusual mentality or of remarkable and unusual mental penetration, have generally been held under suspicion as the maunderings of the insane until the people became so used to the truth advanced that they accepted it.

The most remarkable phenomenon of our time occurs in that department of medical jurisprudence incident to insanity. The alienist in his endeavor to ascertain whether a person is sane or insane, makes no investigation of the general processes or functions of the body, in an attempt to ascertain the amount and character of general distortion, and from the distortion and function to approximate the degree of brain abnormality, if any, and deduce the kind of mental function taking place.

On the other hand the alienist watches and studies the person for the purpose of ascertaining how nearly his mental operations comport with the usual and ordinary upon the same subjects, or in like emergencies, and reaches the conclusion of sanity, or insanity and its gravity from such abstractions.

It is not necessary to discuss the inadequacy of the method just outlined, for the purpose of arriving at a just conclusion as to whether a person is sane or insane. By that method Christopher Columbus, Galileo, Robert Fulton, Benjamin Franklin, Wilbur Wright, Marconi, Thomas Edison, Elbert Hubbard,

D. D. Palmer and the author of this work would all have been classified as insane.

The fact is that only those persons are sane, in whom the receipt, transmission, and application of nerve stimulus is wholly without impediment. Or to put it in other words, those persons who have suffered no occlusion of nerve stimulus, and since there are none such, there is no person who is absolutely sane.

In view of the statement just made, it must be understood that there has been established a scope of variance which is classified as being within the physiologic, and within that range of fluctuation, mentality that is produced must be held to be sane. Beyond that scope of fluctuation the pathologic is entered and when that portion of the brain, constructed to produce mind, enters the pathologic, then insanity begins.

To still further explain the statement in the last paragraph, it must be understood that minds produced from brains, acting within the scope of certain mild phases of pathology, do not receive the classification of insanity, but are designated as being queer, mentally odd, eccentric, or off mentally, in some particulars. However, the cold fact must be reached that all of these phases are simply insanity.

The idiot is not classified as being insane, and yet there is no doubt that his brain does not function to the production of mind that falls within the scope of sanity. The reason the idiot is not classified as being insane is because it is the general conception that a person cannot be insane unless he has had mind, and lost at least some phases of it because of brain pathology. The idiot never having had mind does not come within the classifica-

tion. In other words, idiocy is the result of an anomalous construction of those parts of the brain, which should function to the production of mind, so that they completely fail to so function.

There is another class of defectives that should be referred to in this connection, the condition of which is sometimes analogous to that of idiocy, although not necessarily so. The reference is to the child of parents too near akin, such as double first cousins, father and daughter, son and mother, aunt and nephew, niece and uncle, and the like.

Children from the character of inbreeding stated in the preceding paragraph are frequently born with brains, portions of which are incapable of producing certain qualities of mind. The reason for this lies in the fact that the chemical formulae of the father and mother are so similar as to fail to give scope sufficient to produce all of the parts of offspring. Children born in this condition are quasi-idiotic.

It must be admitted that children born of parents too near akin many times present incipiently brilliant mentality, marked mental precociousness, etc. But all too soon these functions languish, and are eventually lost in what is called insanity. It is perfectly clear in this connection that the reason for the result, is that the chemistry of the parents is so similar, that cohesive resilience is not had in the mind forming portions of the brain formed, and early in life resistance is overcome.

If brain tissue is abnormal as to consistence, the functions of the brain will be in ratio abnormal, and if that part of the brain tissue that is abnormal, is the

part which functions to the production of mind, it will be in ratio abnormal or insane.

It has been seen that abnormal tissue is produced by trauma on the one hand, and chemical adversity on the other. Therefore, insanity may be the result of tissue injury by trauma of cortical areas, or may result from injuries to cortical areas by the accumulation of adverse chemistry, which, might occur without incipient trauma and, of course, would result from direct injury elsewhere.

To illustrate these propositions, it is only necessary to call attention to fractures of the skull, where the plates are pressed down upon the brain, which has been known, many times, to produce insanity, and in such cases when the skull is raised off the brain, it nearly always resumes the production of normal mind.

As to insanity as the result of chemical adversity, it is only necessary to recall the marked deliriums which occur as incident to so-called acute febrile processes, such as delirium tremens, typhoid fever and the like, indeed, any case of insanity which has resulted without definite traumatic injury.

In phases of insanity which occur without definite traumatic injury, it will always be found that there is marked chemical adversity, and that there is widespread occlusion of nerves to the brain, producing marked cortical stases with the precipitation and retention of adverse chemistries, which by irritation and motor reaction continue the adverse functional process, and are paramount in the fluctuations of its peculiar and marked expressions.

Insanity, resulting from the adverse processes outlined in the preceding paragraph, would never reach

the grave and pronounced effects they sometimes do, if it were not for the fact that concomitantly with all phases of such insanity there is abnormality of equal gravity in the large glands of the body, and that the general organism is adversely affected in ratio with brain adversity.

It will be seen that glandular abnormality is a paramount process incident to the production of insanity, and that insanity resulting from chemical adversity can not be removed without first obtaining an approach to the normal in the large glands of the body.

What has just been stated is not more than saying that the reactive processes, superinduced by irritants, frequently induce such glandular, and therefore, chemical accumulations in the brain, as to result in insanity.

To illustrate the last statement, it is only necessary to refer to the fact that to emotionally dwell upon a single theme continuously is frequently a sufficient irritation to bring about the adverse glandular process, and therefore, the chemical precipitation in the brain necessary to the production of insanity.

The mild presentations of this adverse phase have been referred to as spleenic attitudes, and melancholia.

Each case of mental unsoundness presents this diagnostic problem to the Chiropractor. What has caused the tissue adversity of these areas of the cortex which in their function are producing the present symptoms? (a) Is it the result of procreation between those too near akin? (b) Is it from other phases of hereditary tendency? (c) Is it from tissue conditions produced congenitally? (d) Is it from the accumulation or precipitation of adverse chemistry in the brain,

caused by occlusion, resulting in glandular and general functional adversity? (e) Is it the direct result of specific traumatic injury?

When the Chiropractor has answered, or eliminated from consideration these five questions, he is ready for a definite consideration of the case in hand, and his final prognosis, which will be governed by the following rules:

If the adverse brain condition is the result of procreation by those too near akin, his prognosis will be, no possibility of recovery.

If the adverse brain condition is the result of hereditary tissue tendency, the prognosis will be more favorable, but nevertheless will be, very doubtful.

If the adverse brain condition is the result of tissue adversity, produced congenitally, the prognosis will be still more hopeful, but will still remain doubtful.

If the adverse tissue condition is the result of adverse glandular processes, and therefore, adverse chemical accumulation, the prognosis will be favorable provided proper conduct in all ways can be obtained on the part of the patient. This phase, however, introduces many elements of doubt into the prognosis, because it has been found most difficult to secure the conduct necessary for the recovery on the part of the patient, not because of anything to be charged to the patient, but to the idiosyncracies and adverse theories impressed by therapy upon those having him in charge.

If the adverse brain conditions are the result of a specific traumatic injury, the prognosis will be favorable, always provided the injury done by the trauma is capable of being removed; that is, if the injury is in a place where it can be got at and corrected. This sug-

gestion is made because sometimes as a result of trauma, for instance in the base of the skull, foramina are distorted sufficiently to occlude nerves to the brain, causing insanity, which foramina cannot be corrected, and in such a case the prognosis would be, no recovery.

With regard to insanity, which is the result of tissue conditions superinduced by adverse chemistry, and specific traumatic injury, the author wishes it understood that at least eighty per cent of such cases may be completely recovered, while the number of cases where the tissue condition is from congenital or hereditary adversity, that can be recovered, will not exceed fifteen per cent.

Relating to remove insanity is addressed to removing occlusion from all nerves to the brain, and irritations from the terminals of all projection nerves extending from the brain.

It will be seen that the statement just made includes primarily release of occlusion to the four depuratory and eliminating channels of the body, and all of the large glands that have to do with such channels of depuration and elimination; the spleen, liver and pancreas accessory to the intestine; the kidneys incident to urinary elimination and depuration, and then the lungs and skin since they relate to the process of depuration and elimination. For, of course, before occlusion of nerves to the brain, and adverse vibration in the nerves extending from the brain can be overcome, adverse chemistry must be depurated from the areas of its production and eliminated from the organism.

Therefore, primary attention must be given to releasing nerves that ramify the large digestive glands,

kidneys, lungs, and all areas of stasis in the skin; concomitantly therewith correcting distortions that affect returning nerves to the brain, and large trunk nerves extending from the brain.

In connection with the relating process, it seems hardly necessary to say that correct diet, clothing, housing, exercise, and total abstinence from exciters, such as tobacco, alcohol, all other narcotics and habit-forming drugs, and complete removal from sex, and other mental or emotional excitations or indulgences, is of paramount importance, and necessary if success is to be attained.

Part Five

A BRIEF STATEMENT OF THE PRINCIPLES OF DIAGNOSIS

CHAPTER LIII

DIAGNOSIS IN GENERAL

The subject of diagnosis practically comprehends the whole of human experience. There is no phase of conduct that is not of importance to the diagnostician.

The importance of each phase of conduct, as an element of diagnosis, is made profoundly clear to the student of Chiropractic when he realizes that the transmission of the force of life, ordinarily called nerve stimulus, causes not only the formation of the organism but produces the seat of intelligence, and controls each phase of conduct that is accomplished.

Impulse to act is as completely a phase of conduct, produced and controlled by nerve stimulus in that part of the brain in which it occurs, as is the application of stimulus that causes the movement of liquids in the conduct called assimilation, or the action of muscles, or any other part of the body.

It is just a little difficult for a student, reared to the specious theories of therapy, to grasp the proposition that each phase of function or conduct is only the response of matter to the application of force—matter being confined to the extra environment of this physical world and its atmosphere, while force comes from a source outside of matter, for such a conception is entirely different from that met with in ordinary thought and practice.

After the student has become fairly familiar with

the principles of Chiropractic, however, the conception that each phase of function or conduct that takes place in the body is the result of the application of force to matter, is not difficult to understand, and in the same sense it is not difficult to understand that each phase of such conduct is important as a diagnostic aid.

Since force, entering a specific channel, the brain, and being transmitted through the nerves, and applied at the endings of the nerves, causes all phases of function or conduct, it is perfectly clear that each character of conduct or function sustains the same relation to that force and its application, and if the radiation and application of that force is regular, that is, not disturbed in any way, that each phase of conduct will be normal.

As a necessary corollary to this statement, any interference with the transmission of nerve force will change the character of the phases of conduct which should take place as a result of the usual application of that force, and the change in conduct will always be in direct ratio with the interference with the transmission and application of that phase of force.

In view of what has just been stated, the student will understand that in order to master diagnosis he must learn to look upon the human body as a machine. He must learn to understand that any deviation in conduct from the usual or normal is the result of interference with transmission or application of nerve force. He must learn to be able to appraise the deviation of that conduct from the normal, or in other words, he must be able to understand the extent of interference with the transmission and application of force, and the effect thereof upon the conduct of the part or organism.

In order to know the amount of interference with the transmission and application of force, the diagnostician must understand what is interfering with the transmission or application, the character of that interference, and the extent thereof. He must know whether the interference has been produced by traumatic injury or adverse chemical effects; and whether the injury is a continuing one, being produced by abnormal chemistry, and, if so, what is the cause of the continued production of such adverse chemistry, whether the same is the result of irritation from anomalous construction, changes in tissue structure, or from erroneous raw material intake.

To accomplish the object just stated, the Chiropractor must be possessed of a full and complete knowledge of the anatomy and physiology of the organism. His knowledge must be of such character as to constitute him an expert mechanic of the human machine ordinarily called the body.

The student can never become a mechanic of the character just indicated by the study of books, or the dissection of morbid tissue, but if he will use such aids until he has obtained a knowledge of all data recorded, he will be prepared to complete his knowledge by a careful and extended study of the living human organism, by observing it in all of its phases of conduct or function, and by extending his scope of observation to a sufficient number of organisms to acquire a knowledge of all of the various types of conduct of which the human organism is capable.

In this connection it should be understood that no two organisms ever performed conduct in exactly the

same way. Yet it will be a relief to the student of human function to know, that all conduct of organisms falls into general departments, that there are not many departments of conduct and that it is not difficult to tell to what department of conduct each type of person belongs.

The reference in the last paragraph is to organisms that have generally been classified as refined, coarse, sensitive, sluggish, etc.

It must, of course, be understood in connection with the thought being presented that there are many organisms which cannot be classified with any type, but that are multitype in conduct. However, even in such contingency the student will be aided by the knowledge he has acquired of types of conduct, and will be able to distinguish the different phases with sufficient accuracy.

From what has been said it will be seen that the manner in which an individual stands, walks, runs, sits, or lies, sustains a direct relation to the transmission of force into and upon his organism, and gives information of the condition of that transmission to one sufficiently advised, to correctly translate the meaning of that conduct.

The manner in which an individual breathes, talks, laughs, or sings also bears evidence as to the transmission and application of nerve force to his organism, and reveals the degree of interference with the transmission of force, if there be any, to those who are possessed of sufficient mechanical knowledge to see, know and translate.

In the mention of these several characters of conduct it is deemed well to indicate a sufficiently wide range

that the student may make complete application of the thought, and understand that it is applied to all function or conduct. In this connection he is reminded that persons who have no particular instruction along these lines, rely perfectly upon being able to tell, upon the casual meeting of a stranger, whether he is angry or happy. Such persons do not realize the fact, but they attain this knowledge from the ensemble of conduct of the individual, and in doing so are simply demonstrating diagnostic ability.

Almost any person would be surprised at having his attention called to the diagnosis of anger or happiness on the part of the one observed, because it has never occurred to the ordinary person that such a diagnosis is difficult. Yet it will be found when an attempt is made to analyze the situation, and to understand how such a diagnosis is accomplished that the entire subject is beset with complexities.

The ordinary individual, after thinking the matter over carefully, will admit that he does not know how he knew that a stranger he has met is angry or happy. However, he will insist that he knew it because the individual looked that way, without stopping to understand that looks, in that particular respect is made up from departments of function or conduct.

The looks just referred to particularly refers to the face, and at this point the student's attention must be called to a very important proposition or phase of expression, with which he is not so familiar.

The human organism, when viewed by one who has learned its mechanical construction and physiological operations, gives forth an expression that is as truly

characteristic of the character of its functional conduct, as the expression of the face indicates the character of certain emotions.

People usually suppose that expression is confined to the face, but a little thought will make it clear to the student that the whole body is just as expressive as the face, and that emotions are as clearly depicted on any part of the body as they are depicted upon the face, leaving out of the discussion specific education of the tissues of the face.

The human face has substantially always been uncovered of clothing, and has, therefore, been the subject of continuous study, and since the eyes, which are paramount in expression, are located in the face, the face has been accredited with more expression than is its due.

To fully appreciate the statement last made the diagnostician should study the face of the blind, or the face of an individual whose eyes are closed, and do this remembering that, because the face has been exposed, its tissues have been the subject of much training with the desire to produce unusual expression, or to accomplish dissimulation.

It is a common proposition, and one with which all are familiar, that the strong and well person has the active, erect, and elastic carriage, and a happy and enthusiastic expression; and are just as familiar with the drooping, pessimistic, indecisive attitude of the dejected, soured and sick. All are familiar with the elastic step of the one that has power and virility, and of the shuffling, uneven tread of the weak and invirile.

The student must remember that the things suggested

in the preceding paragraph are all of the greatest importance in diagnosis, and the different characters of conduct referred to are only expressions of the normal receipt, transmission, and application of nerve stimulus, producing right chemical formulae, and directing the assimilation thereof into strong, elastic, and virile tissues upon the one hand; and upon the other the interference with the receipt, transmission, and application of nerve stimulus, causing the production of abnormal chemical formulae, resulting in the weak, stooped, depressed, invirile and sick.

Shape is of paramount value as a diagnostic proposition. Indeed, shape controls relation, and relation dictates the character of function or conduct.

In other words, if the different parts of an organism are shaped according to the image after which that organism is patterned, their relation will be correct, and the conduct or function incident to the application of stimulus to them will be normal.

It must be remembered in this connection, that abnormally shaped parts result in anatomic disrelation and the application of stimulus to such parts must of necessity be interfered with, and therefore, the conduct or function of such parts must be abnormal.

In view of this phase of the subject, shape is very important, in that it reveals by comparison the phase of conduct that has maintained during the formative period. That is, the present shape of parts reveals the story of their formation, and tells of interference with the application of formative force to them during their period of formation.

To illustrate the statement in the last paragraph, the

shape of the feet of an individual, for instance, is direct evidence as to the interference with the receipt, transmission and application of stimulus to them during their formative period, and in the same sense furnishes evidence bearing directly upon the relation or formation of other parts of the body which controlled the formation of the feet.

The shape of the feet of an individual, therefore, furnishes knowledge to the expert by which he is able to diagnose the skeletal relationship of the pelvic girdle; that is to say, the innominates and sacrum, the immediate attitude of the feetward lumbar column, and the general attitude of the entire vertebral column and the skeletal body.

In the same way the hands indicate to the diagnostician the relation sustained by the osseous segments that control the brachial plexus; that is to say, the fourth, fifth, sixth, and seventh cervical vertebrae, and the first and second thoracics particularly, and incidentally the clavicles and scapulae, especially at their acromian relation.

Following the thought, the shape of different parts of the body furnish positive evidence as to the transmission and application of stimulus during the period of their formation. The anomalous orifices of the sex body, and the eyes, nose, and mouth are peculiarly demonstrative of this fact.

In connection with the thoughts that have just been presented, it must not be overlooked that the shape and attitude of the tissues of organs and orifices of the body present profound evidences of the present interference with the transmission and application of nerve stimulus,

and indicate the exact amount of interference which is being caused thereby.

It will be seen that the individual who would become a diagnostician must become an expert observer, and and must learn that he cannot put aside or neglect the most simple and apparently unimportant circumstance.

The mistake has been made of supposing that Chiropractors do not attend to effects, but that they deal wholly with causes. This is indeed a profound mistake. The Chiropractor's entire diagnosis is directed to the observation of effects, and the deduction of causes from such effects.

In this connection it must be remembered that a vertebral subluxation is nothing in the world but an effect. It cannot be diagnosed nor understood except by ascertaining by comparison the effect of its disrelation, and the sequential effects incident to the distortion which results from it.

Starting with the fact that simple disrelation and subluxation are effects, we observe that the entire work of a Chiropractor is peculiarly and solely confined to ascertaining and removing effects. He is the doctor above all others who must understand every phase of function or conduct of the human body. He must be able to take into consideration at one sweeping, all-comprehensive investigation each department of conduct, and must understand just what effect each of such phases of conduct produce upon and within the human machine.

The Chiropractor should understand, since the human body is a machine, that all parts of it are equally important, and that shape, color, size and relation of each

part of it determines the conduct of that part. He should also realize that the conduct of each part has its effect on each other part and generally upon the whole organism, as to its general functions and the details thereof. He should know that when shape, color, size and relation of each part are read and understood they capacitate the observer to appraise the exact degree of abnormality in the organism.

CHAPTER LIV

RELATION OF SYMPTOMS TO DIAGNOSIS

In the twenty-three hundred years or more in which therapeutics, classified under the head of medicine, has held the field, practically undisturbed, an immense literature has developed on the symptoms of disease.

Whatever else may be justly said of the faults and foibles of therapeutists, commendation should be extended to them for their indefatigable observance and recording of the symptoms of disease even though done from their viewpoint.

In this connection, however, it must not be overlooked that therapeutists of all ages should receive the severest criticism for having only observed and recorded symptoms of disease instead of recording symptoms generally, whether of abnormality or normality. It is clear that symptoms, in this view of the thought are only evidences tending to establish the one or the other of these two conditions.

The thing, however, for which therapeutists should receive the most blame is that they have expended substantially all of their labors in the observance and recording of symptoms in an effort to prove that a certain disease, which they had named, did or did not exist; that is, the observance and recording has been expended in an effort to prove that the symptoms necessary to constitute a certain disease were present or were not present, instead of expending effort in the

observance of symptoms for the only legitimate purpose; that of ascertaining the exact physical condition and functional conduct in order to be able to declare health or disease and the extent of either phase.

The entire purpose, as seen in the chapter preceding this, of any doctor making a diagnosis is to ascertain the exact status of condition and operation, and the cause of that condition and functional process.

However, if therapeutists had gone about their work in the manner just indicated, therapy or the so-called science of medicine, would long ago have ceased to exist, for it would have been transformed into a system of analysis, displacing theory for fact.

If, during the centuries of medicine, investigation and recording of truth had been as persistently carried on, as the observance of symptoms to sustain theory has been, human beings at this time would know substantially all truth concerning their bodies, instead of looking upon them as mysteries, and would be evolved and well instead of a race of degenerates.

Chiropractic is young, but it has set the example to the world of properly investigating the organism with a view to ascertaining: (1) the normalness or otherwise of its construction; (2) the amount of divergence from normal construction; (3) injuries as they effect its structure, anomalies affecting its conduct; and (4) its functional operations, proving the amount of divergence from the normal in construction or structure.

The truth that Chiropractic has been able to develop is comprehensive of the entire subject, and is fast impelling all methods to discard internal medicine; to abandon the theories of disease, as therapeutically

promulgated, and attend to the simplicity and beauty of truth as revealed by the organism in its conduct or function.

No human being has a right to teach what he cannot demonstrate, and if Chiropractors will adhere strictly to the plain and simple truth, which is always capable of demonstration, it will not be long until theory will have disappeared, with its sickening posing of hypotheses.

In all the vast lore of therapy there is nowhere the expression of the conception, that a symptom could apply to anything but disease. As already stated, this is clearly erroneous.

Chiropractic teaches that a symptom is only an evidence of a structural condition, or a phase of functional conduct indicating a tissue condition, whether it be a symptom tending to establish the normal, or the abnormal.

Symptoms of normal structure, and therefore of normal function or conduct, are fully as numerous and certainly of as much value to the diagnostician as those that tend to prove abnormal structure and relation and therefore, abnormal processes.

Since Chiropractic teaches that there is not "a disease," but that there are only phases of abnormality, it will be seen that the Chiropractic diagnostician exercises a very large liberty. It is not necessary for him to determine what disease, speaking therapeutically, the individual has, but only to determine what phase of abnormality is paramount in the organism under consideration.

The Chiropractic diagnostician is as intent on observ-

ing symptoms of normal relation and process as he is those of abnormal relation and process. He knows that by noting the symptoms of relationship and normal function, he will find the part or parts of the body that are abnormal in relation and function. He knows that interference with nerve stimulus is the cause of all functional abnormality, therefore, he is primarily seeking to locate abnormal relations interfering with transmission of stimulus; knowing that when he has located and appraised those distortions he will know what is the matter with the individual, and when he has ascertained the extent to which transmission of stimulus is interfered with, he will know the exact gravity of abnormal tissue and process, provided that he can also correctly appraise hereditary tissue tendencies, and congenital influences.

A Chiropractic diagnosis, therefore, consists in observing all of the symptoms, conditions and functions of the patient; those that tend to prove the normal as well as those tending to prove the abnormal, and from the same to determine what segments, organs or parts of the patient are distorted; in what respect and to what extent, the gravity of occlusion resulting therefrom and the character and gravity of the abnormal process caused thereby.

The diagnostician makes no effort to name the situations, for they are but disrelations producing adverse functional processes, which are but the expressions of the disturbed action of stimulus or the force of life.

The diagnostician is always aware that he has never seen another distortion and functional process exactly like that under observation, and knows that there is no

wisdom in, nor justification of, an attempt to name a structural distortion and its sequential shifting process which does not present the same symptoms at any two periods.

It is hardly necessary to remark that in diagnosis of the character outlined, it is not the object to ascertain "what disease" the individual has, but to ascertain with the greatest exactness of detail what is the matter, to use the layman's term, with the patient.

A therapeutic diagnosis consists in noting the symptoms of disease to ascertain whether or not they bring the condition within any of the "named diseases." If, in the judgment of the diagnostician they do, he declares that fact and names "the disease;" if they do not, the diagnosis fails and he must await the development of other symptoms before he can name "the disease."

By "named diseases" it will, of course, be understood that the reference is to such therapeutic designations as typhoid fever, small-pox, pneumonia, and the like.

It is impossible to classify symptoms constituting a disease, yet, for aggrandizement the therapeutist assumes to do so; this frequently leads to great damage to the patient. The diagnostician, after his investigation, declares that the patient has "a disease" which the patient believes to be fatal and suffers severely as the result of this adverse suggestion.

Frequently diagnosis is made of "a fatal disease," when sufficient symptoms, even therapeutically, do not exist to justify it. A great deal of damage results from this character of diagnosis. It is never necessary nor wise to attempt to name any adverse process.

The therapeutist, in his appraisement of symptoms, lays much stress upon the various coatings and colors of the tongue; the pulse, as to its frequency and character; the so-called sounds of the heart, the strength, regularity and otherwise of its beat; respiration and its various sounds; the various expressions of the countenance; the color of the face; the conjunctiva of the eyes; swelling or other indications of inflammation; the conduct of the bowels and other digestive organs and the appetite. He occasionally employs palpation and percussion to determine the feel and resonance of parts.

In connection with the measures mentioned, where it is possible, the therapeutist institutes an extended interrogation of the patient, as to how he feels, how long he has felt that way; and when he can, also interrogates the relatives, etc., as to the patient's conduct and complainings.

After the therapeutist has finished his diagnosis and *named* " the disease," he is ready to ponder upon and finally pronounce his prognosis, which is his guess, as to what will become of " the disease" under the treatment that he proposes to administer, which must be, that his remedies will destroy " the disease," or that " the disease" will result in the death of the patient. He will, of course, go into some detail and perhaps for self protection into some indirection as to either of these results.

The Chiropractic diagnostician, first makes a very careful and thorough examination of all the articulations and skeletal tissues to determine whether or not there is distortion and occlusion of stimulus anywhere.

He largely employs palpation in his examination, however, using in connection therewith every avenue of sense including primarily that of sight. He will also ascertain whether there is displaced viscera or other parts.

The Chiropractor examines the body for contusions and locates areas of disintegration by palpation and percussion, aided again by all of the senses. He takes note of the color of the skin, expression of the face, the various expressions of pose and attitude of the entire body.

The diagnostician should make a very careful and detailed study of the colorings of the iris of the eye, an extended discussion of which is given in the succeeding chapter. He should carefully note the evidences of morbid deposit in different parts of the body; he should feel and listen to the movements of the heart, and large vessels, and the movement of substances in the alimentary canal.

The examiner should pay particular attention to the condition of the tissues of the body generally, taking especial note of their resistance or lack of it; constriction or flaccidity; fixation or otherwise; abnormal color or lack of color; swelling or shrivelling; enlargement or atrophy and the conditions evidenced by the movements of the body. Indeed, he should allow no tissue condition nor conduct to escape him. These are the essentials of his diagnosis.

By the means mentioned, having located the places of occlusion, and having determined the gravity of each, the examiner knows what organs and parts are involved, and to what extent, and from that information can

determine the degree of abnormality and the phase or phases of the adverse functional process, without being told anything about the patient in the ordinary way, or by any other person, in what is usually called " the history of the case."

The Chiropractor will not permit the patient to attempt to furnish him information until he has finished his diagnosis and then only of a historical character, because he knows the patient does not know what is the matter with him, and that any attempt on his part to furnish information is almost sure to be misleading, and that to rely upon it to any extent would lead the diagnostician astray and then it sends him into the case with partly formed impressions which the situation will not justify.

Chiropractic diagnosis requires the exercise of all the sense qualities of the diagnostician, psychic as well as mental. It is a process of deduction from the law of normal construction and operation and is, therefore, substantially unerring.

Prognosis: After the Chiropractic diagnostician has made his diagnosis he is ready to pronounce his prognosis, which is his opinion of the ultimate result of the distortion and abnormal process under the reaction, which he proposes to establish by securing the relation of the parts thus removing occlusion of stimulus.

The prognosis must be of some degree of recovery or death, the probable time which will elapse before the result declared will occur, and the different symptoms in their order, ordinarily termed reactions, that will occur during that time.

CHAPTER LV

DIAGNOSIS FROM THE EYE

There has been much written on the subject of diagnosis from the eye. A Doctor Lane of Chicago first published a treatise on diagnosis from the eye in this country.

Lane, and the writers subsequent to him in this country, have all been therapeutists, and their data with respect to the eye has been based upon the specious theories of therapy, and are, therefore, not of much accuracy or value.

The short discussion of diagnosis from the eye that is given in this and the next chapter, are for the purpose of aiding the diagnostician to use this method to confirm his Chiropractic diagnosis.

The facts stated with regard to diagnosis from the eye are deduced from the fundamental principles of biology and Chiropractic, and therefore, do not in any sense conform to the theories of Lane, or any subsequent writer upon that subject.

History is replete with facts relative to the eye. The eye has always been looked upon as an organ of such importance that even the most ancient chronicles of warriors and great men describe with much minuteness and detail the eyes and the expressions thereof, not only generally but upon special occasions of greatness.

History, romance, and poetry from the earliest times have described the eyes of kings as being peculiar and

unusual, and such statements are based upon the assumption that the eyes of kings are different from those of ordinary persons, and indeed, that the eyes of royalty exceed in intelligence and brilliancy those of ordinary humanity.

History, poetry and romance is full of eulogies upon and phantasies about the eye. Indeed, if we should take out of history, song and poetry all reference to the eyes of human beings with regard to expression and power, all of the history, poetry and song in the world would have to be rewritten, and would occupy much less than half the space it does now.

The eye has always been looked upon as an organ of power; not only in the matter of control and direction, but as an incident to expression. Indeed, the eyes form so large a part of expression that without their aid the human face would be well nigh expressionless.

It must be admitted that the blind learn phases of facial expression, but these are indeed incompetent when compared with a face of the same power and education illumined by the eyes.

The foregoing statements are made to call the student's attention to the far-reaching and comprehensive facts that are to be detailed in this and the next chapter.

Coming a little closer to our subject, and considering it very carefully, we realize that it is the iris of the eye that gives to it its power and expression.

It must also be remembered that it is the iris of the eye that is observed and to which diagnostic attention is now specifically directed.

Speaking anatomatically, the iris of the eye is a

remarkable combination of structure. It is first of all composed of a basement membrane on which there is distributed the sphincter muscle fibers which are circular, and the dilator muscle fibers which are radiating.

The sphincter muscle fibers serve to contract the pupil of the eye, which is an aperture through the center of the iris, and the radiating fibers serve to dilate the pupil.

The sphincter and radiating muscle fibers described are deposited in a stroma in which there are arterioles from the ciliary border of the iris toward the pupil, and venules of drainage radiating from the pupil toward the ciliary border.

Among the arterioles and venules there is an extensive lymph transportation system accompanied by very extensive nerve plexuses. This lymph and nerve arrangement is supported and held in relation by a delicate tissue frame-work.

A very close and careful inspection of the iris will disclose that it contains substances similar in character and construction to those found in any and all parts of the body, save and except ossific granules. The student must remember that this is a very important fact as incident to the study that he is now about to make.

It must also be remembered in analyzing the iris of the eye that it contains a ramification of nerves which represents each part of the body, and that injury or pain in any part of the body produces its peculiar changes in the iris of the eye.

The color of the eyes is due chiefly to the deposit of pigment in the various substances occupying the stroma of the iris. The normal deposit of pigment determines the original, or better still, the normal color of the eyes.

Dr. Lane in his book contends that the normal color of all eyes is blue. However, it must be remembered that he is a German, and that probably accounts for this statement. The fact is that the normal color of the eyes of different races and peoples differs as materially as does the color of their skins; and that the smooth, black shining eye of the African is just as normal to his race as the smooth, shining blue eye is normal to the German of the north.

In this connection, however, it must be remembered that the normal color of any eye may be changed by deposit of pigmentary residues in the iris incident to abnormal processes in the body.

The iris is reached and ramified by nerves from all parts of the nerve system. Therefore, infinitesimally small portions of the iris corresponds to each part of the body, and abnormality in a part of the body which corresponds to a small portion of the iris causes that portion of the iris to change its color and appearance, by lessening or increasing the amount of pigment, or causing a distorted or changed appearance in the pigment, so that it may look dirty or cloudy.

Recalling for the moment the nerve system as a bilateral structure, and remembering that it is the law of its formation that there is a continual commissure between its two sides, we are prepared to take up the analysis of the iris.

Considering the iris of both eyes, then, as constituting but one iris, it faithfully reveals abnormality or adverse process in any part of the body. In other words, when looking into that combined iris we see plainly revealed each phase of abnormality of the organism as completely

as if we were able to look into the whole body through its tissues, and observe its distortions and abnormal processes.

No diagnostician probably has ever lived who did not wish that he could look into the organism through its flesh, and see its operations in order that he might correctly diagnose its adverse relation and processes. This has been made possible by a careful analysis of the irides as already suggested.

The energy of mankind has been expended in an effort to improvise apparatus by means of which the flesh could be looked through for the purpose of diagnosis. The nearest approach to this accomplishment is the X-ray, by which shadows of bones, cartilages, and dense tissues may be dimly distinguished, but these cast only dim shadows, and do not in any sense reveal structures, and of course are of no value in the observation of adverse functional processes.

All of the efforts of mankind in this direction have been expended without realizing, that the iris of the eye has all this time been exposed to view through the transparent cornea and aqueous humor, and that the combined irides reveal perfectly every phase of distortion and adverse process in the entire organism.

It will be seen that since the iris of the average human eye is only 11 mm. in diameter, that the portions of it corresponding to the various parts of the body are indeed very minute, and that this is peculiarly true of small somatic areas, and, of course, this is also true of the small visceral organs.

Because of the infinitesimal areas in the irides corresponding to body parts, it will be readily understood

that to go into complete detail and analysis of disrelation of tissue and abnormal process, from the irides would produce a work involving much complexity, and in many cases uncertainty, because of our inability to distinguish between such infinitesimal areas. Such a work, if it could be accomplished, would require a great deal more time, care, and paraphernalia than the Chiropractor needs in this department.

It is a subject of gratulation, that for the purposes of Chiropractic an investigation of the irides does not need to go into any considerable prolixity of detail; the simple and general fundamentals of diagnosis from the eye being entirely sufficient to corroborate Chiropractic diagnosis, which is all that is required.

Diagnosis from the eye is only important to the Chiropractor as a confirmation of his general diagnosis, and to help him to understand with greater certainty, and in more extensive detail the extent of injuries, and therefore, tissue distortion and functional process, which are sometimes not so clearly revealed upon the surface of the body.

For the purpose of diagnosis from the eye, the student will conceive the irides as being merged into one. The top of the merged iris will represent the head and upper part of the body. The bottom will represent the lower part of the body and extremities; while the sides of the iris, generally speaking, will represent the sides of the body.

That portion of the iris immediately surrounding the pupil for a little distance represents the visceral organs of the whole splanchnic cavity.

In this connection it should be stated that each iris

is characteristically marked. The mesial side more particularly representing the visceral, the lateral side the parities. However, somatic markings occur in the complete circle of the iris, and in order that the diagnostician may have a full comprehension of the situation, he must consider each iris separately, and then apply the evidence thus obtained as if the irides constituted but one.

The markings of the iris of the eye, as the result of adverse processes and anatomic distortions are astonishing.

Tissue loss, that is to say, complete tissue disintegration is indicated by spots as though a hole had been made through the iris, and the tissue loss may occur as the result of trauma, or by chemical adversity.

Tissue losses as a result of trauma are usually indicated in the department of the iris corresponding to the injury by a smooth, clear-cut defect. Tissue losses by adverse chemistry and the process of disintegration are rough and more irregular, although indicated by what looks like a hole through the iris, however, the outlines are rougher and more irregular than those from traumatic injury.

Abnormal function as the result of accumulation of abnormal chemistries are indicated by many discolorations of marked and peculiar character.

The general result of adverse functional process has the effect of darkening blue eyes until they become gray, hazel, or sometimes almost brown; and to lighten black eyes until they become brown, yellow, or sometimes almost gray.

Normal anatomic relation, and therefore, normal

process is indicated by a fine, symmetrical iris, no matter what its color may be.

In connection with the statement in the last paragraph it must be remembered that in some very light blue eyes that would indicate a close approximation to normality, the iris will not look smooth, because there is so little pigment within the structures of the stroma that the various fibers can be seen. Care must be taken in all irides not to confuse these structures with morbidity. Remembering the exception just stated, an iris that indicates the normal should be soft, smooth, and regular.

In connection with the statement of the last paragraph, the iris is classified as follows: (1) fine iris; (2) common iris; (3) coarse iris. In connection with these names it must be remembered that the first indicates health, the second some degree of abnormality, and the third grave and chronic abnormality.

Signs of functional abnormality in the eyes are of two characters: lighter colored lines, points or clouds indicate fever and inflammation; darker colors in the light eye, and lighter colors in the dark eye indicate morbid accumulations or abnormal chemistries, which it must be understood represent infinitesimal tissue losses, and these indications increase as larger areas are involved, until they are indicated by black spots in the lighter eyes, and yellow to grayish spots in black, brown, or hazel eyes.

The discolorations of the iris present themselves in many forms and combinations. They appear in white lines, clouds, silvery sheen, and points in light blue or light gray eyes. Yellow streaks with points and yellow

sheens in brown and hazel eyes, and in brown to yellow sheens, streaks and points in dark brown and black eyes.

There is also another phase of these discolorations which should be described. There are gray dots and streaks in blue eyes; gray streaks or dots with gray smudges in hazel eyes; hazel streaks, dots or smudges in brown eyes; and gray, yellow and brown dots, streaks and smears in black eyes.

The location of defects and markings in the iris of the eyes indicate their diagnostic value to the student under the general key given in the next chapter. By use of the key, remembering the character of these discolorations and defects, the diagnostician can quickly locate them and their character, and by that means locate the organ or part that is affected, and determine the character and gravity of affection.

For the purpose of a rough illustration of the character of defects that the diagnostician is to look for, he is referred to the figure herewith given, which is nothing but a rough schema, and of course is but a black and white print, so that the colors to be looked for are not given, but the style, shape and peculiarities of the defects are indicated, and if in addition to this he will remember the colors already given, the two will aid his imagination so that by careful and extended examination of many irides he will become proficient in arriving at the very truth of any pathologic situation.

In the next chapter a key to the diagnosis from the eye will be given in the form of a rough department sketch, which will meet with the necessities of diagnosis from the iris, for the purpose of corroborating the Chiropractic diagnosis.

This figure is not intended to show defects in the stomach and intestinal rings. Such defects are the same in discoloration as others, but are more infinitesimal.

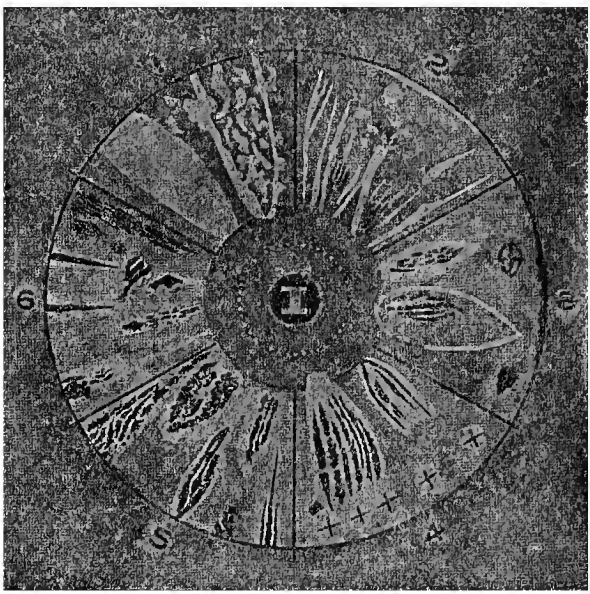

FIGURE 1
IRIS—TISSUE INJURY INDICATIONS

Note:—The student will observe that Figure 1 is only intended to give the character of defects that occur in the iris as the result of distortion. The location of defects as given in this figure is of no significance, but is to give the student characters in white and black which will direct him to an understanding of defects that he will find in the iris of the eye.

The defects indicated in this figure will be given commencing on the left side of section 1, and each defect will be described in its order entirely around the circle; the letters of the alphabet being used for designations.

A. Left half of section 1, large white cloud indicates pronounced inflammation in its earlier phases before great tissue degeneration has occurred.

B. Right half of section 1, alternating inflammation of a somewhat more chronic type than (A).

C. Section 2, chronic inflammation in earlier stage. Black lines and dots indicating disintegrating tissue with retained morbidity.

D. Section 2, white streak along rim of iris indicates inflammation of a prolonged character, and is of the same character as that produced by continuous use of glycerine and alcohol.

E. The first figure in section 3 indicates closed defect of an inflammatory nature; has greater morbid accumulation than that of section 2.

F. The figure immediately in the right aspect of section 3 indicates a wide and chronic inflammation, with extended areas of tissue loss.

G. The first defect to the right deep in 3 indicates internal tissue loss by trauma with continuing inflammatory processes.

H. The figure near rim right side section 3 indicates total tissue loss in an area by trauma.

I. The defect at the rim of section 3 indicates extended tissue loss with morbid accumulation in subcutaneous or superficial tissues.

J. The first figure in section 4 indicates an open defect the same as in section 2, of long standing and with greater morbid accumulation. The next figure in section 4 indicates the same thing, but covering a wider area and of longer standing.

K. The other figures in section 4 indicate tissue losses of various kinds by abscess or trauma.

L. The indications in section 5 show both open and closed inflammatory and chronic defects, with large

areas of tissue disintegration and morbid accumulation, with small areas of the same character. The indications of this section are quite general, and are only presented to give the student a wider range of ideas.

M. The first half of section 6 is the same as 5 except that the defect extending out to the rim indicates skeletal tissue effects rather than visceral, while the defects further in indicate pathology of the viscera.

N. The indications in the remaining portions of section 6 show abscessed conditions with morbid accumulation peculiarly incident to abnormal function of glands.

The student must understand that in a black and white figure such as this the defects cannot be given accurately, and to these signs of defects he must add the discolorations from the descriptions given and those in the next chapter, aided by examination of many irides in order to become proficient.

CHAPTER LVI

KEY TO DIAGNOSIS FROM THE EYE

The student's attention is called to figure No. Two herewith shown as furnishing the basis of the key to diagnosis from the eye. He is to understand that the figure represents the iris of the eye divided into seven concentric rings, by eight circles equally distant from each other.

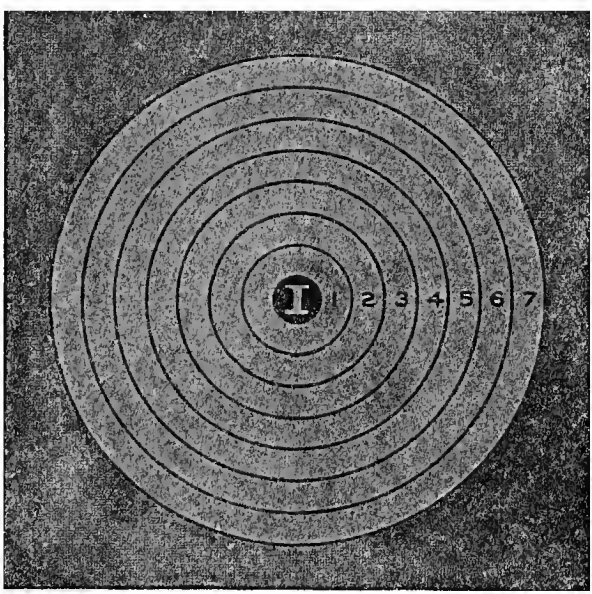

FIGURE 2
IRIS—DIVIDED INTO SEVEN CONCENTRIC RINGS

Note:—The student will observe in this figure that the iris is divided into seven distinct departments, which are of the same width, but progressively become longer with each space.

In thus dividing the iris it will be found that the space enclosed within the innermost circle represents the pupil. The spaces between the remaining circles divide the iris into seven areas, which are of equal width, but of remarkably different lengths; the length increasing in proportion to the diameter of the iris with each new space.

The student will understand that the figure represents the iris, and for the purpose of diagnosis may be considered as representing both irides merged.

For the purpose of conceiving the merged irides, for analyzing the human organism, the diagnostician should then imagine a miniature human being just the height of the diameter of the figure placed upon the same, so that the head is at the top of the picture, while the lower end of the body is at the bottom of the picture.

With the conception of the organism occupying the composite iris as indicated, the student should conceive the stomach and small intestine as the center of the figure, occupying the first and second rings; for it will be in these rings that defects in the stomach and small intestine will be clearly observed.

At this point the student should divide the remaining five rings into six compartments as indicated in Figure No. Three, numbering the spaces made by the radiating lines from the top around the iris to the right.

It will be seen that by the arrangement just indicated the iris will be divided into thirty-two distinct areas, or compartments.

The student should now conceive each iris as being divided into hemispheres by a line drawn through its

diameter, as indicated in Figure No. Four, herewith shown.

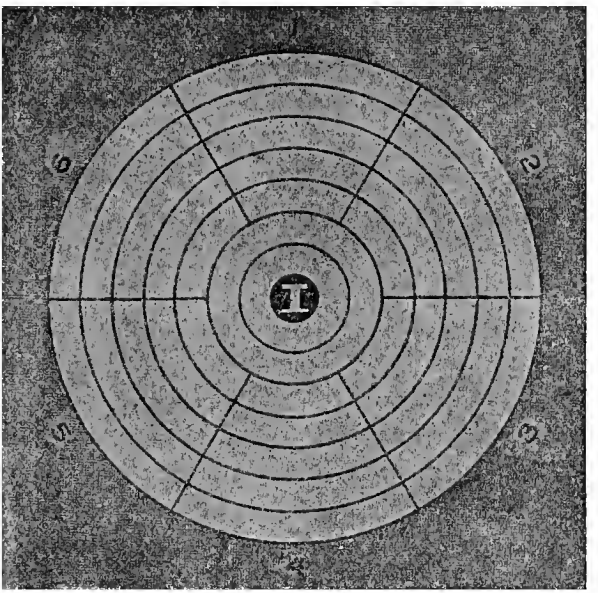

FIGURE 8
DIVIDED INTO THIRTY-TWO SPACES

Note:—The student will observe that the seven concentric rings are as to five of them again divided by six radiating lines, thus separating the iris into thirty-two spaces. It must he remembered that these spaces are only for the purpose of localization of discussion, and that as soon as one has learned the topography of the iris he will not need these rings or lines, and will not think of them.

The line dividing the iris into hemispheres should indicate the mesial line of the body, and defects in each iris will be marked in the iris of each eye according to its location in the body.

The student must remember that injuries to the nerves, such as the intercostal at the back, will be lower down on the venter of the body, but so far as the indication of defects, there is no difference between those

that occur on the dorsum and those that occur on the venter, except as to place as indicated.

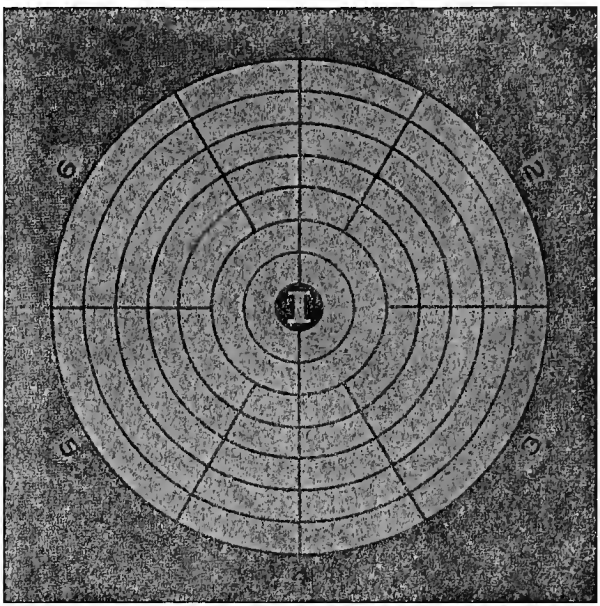

FIGURE 4
IRIS—DIVIDED INTO HEMISPHERES

Note:—The student will observe that the cut here is intended to indicate a composite iris. That is the two irides merged into one, divided by the median line of the body. The defects found in the iris of the left eye will be found particularly marked at the left of this median line and less so in the same area to the right of it and vice versa.

In ring three of division one, are the defects indicating abnormality of the heart, pancreas, and bronchi.

Defects in the heart and bronchi are indicated in the third ring of section 1, the heart defects sometimes merging into section 2; the pancreas in the third ring in sections 3 and 5.

Defects in the third ring in section 4, and sometimes merging into sections 5 and 3 indicate the transverse colon.

It must be explained that the exact location in the rings as just indicated, and as are herein later to be indicated are influenced by the size of the structure in which the pathology occurs. For instance, suppose the defect indicates a tissue loss in the left extremity of the pancreas. The defect would then show more markedly in the pancreatic area of the left iris, and would be only slightly marked in the same locality of the right iris.

In ring four will be found the defects indicating abnormality of the bronchi, trachea, lungs, diaphragm, hepatic and spleenic flexures of the colon, the transverse colon, including certain defects of the kidneys, liver and spleen.

The defects of the bronchi and trachea occur in ring four, division 1, while those in the lungs will be found in divisions 2 and 6 of ring four. Defects of the diaphragm as to its central part may be found in any part of ring four, divisions 1, 2 and 6. Defects indicating the hepatic flexure are found in ring four, divisions 6, and 5. Defects indicating the splenic flexure are found in that portion of ring four, divisions 2 and 3, and those of the transverse colon in ring four, in divisions 5, 4, and 3, depending upon the location of the abnormality in the gut.

Certain defects in the left kidney will be indicated in ring four, section 3, while those of the right are observed in ring four, section 5.

Defects of the liver are indicated in ring three, sections 5 and 4 and may extend wider than the lines of sections 5 and 4, depending upon the area of the liver involved.

Indications of defects of the spleen are found in ring

four, section 3, and may merge into section 2, depending on the gravity of envolvement.

In ring five the indications of defects in the brain and sex organs are found, with certain defects merging into this area from any of the defects indicated in ring four according to their positions.

Defects in the brain are chiefly found in ring five, section 1, while the sexual centers are indicated in ring five, section 4, but it must be understood that brain defects may merge into sections 6 and 2, while indications of sex defects may merge into sections 5 and 3.

In ring six the indication of defects of the liver, spleen, thyroid glands, larynx, pharynx, and the small glands of the cervical region are found.

The indications of defects in the liver are found in sections 5 and 3 chiefly, but will sometimes be found extending across from 5 to 3 of ring six.

Indications of defects in the spleen are chiefly found in ring six, division 3.

Defects of the thyroid gland in ring six division 1 as well as those of the larynx, pharynx and cervical glands.

It must be understood that ring six of the iris is frequently encroached upon by indications of defects from rings five and seven. Many of the signs of defects assigned to ring seven are found as plainly marked in ring six. Sections as diagramed do not establish hard and fast rules, but are only given for topographical directions for examination.

In ring seven indications of defects of skin, subcutaneous tissue, skeletal muscles, and of course the nerves and ganglia therein, are found, and this ring also includes the headward and feetward extremities.

It will be seen that indications of defects of the skin, and immediately underlying skeletal tissues, occur respectively in all divisions of ring seven, and frequently merge into ring six. The body is divided for consideration as stated in the next paragraph.

Indications of defects in the head, neck and upper vertebral column are found in section 1 of ring seven; of the shoulders and upper extremities in sections 2 and 6 of ring seven; of the middle portions of the vertebral column from the fifth thoracic to and including the second lumbar in sections 2, 6, 5, and 3 of ring seven; of the thighs, legs and feet, and the feetward part of the trunk are found in section 4, and sometimes merge into 3 and 5 of ring seven. This is especially true in such phases of abnormality as inguinal hernia.

The defects indicated in the seventh ring, and those which merge into the sixth, are the most interesting of all that occur in the iris to the Chiropractor, because here are to be found defects indicating distorted skeletal tissues, and also tissue losses of the skeletal body, and therefore, from this area of the iris he is most frequently able to confirm his skeletal analysis and pathologic diagnosis.

It must be remembered that rings seven and six of the lateral half of each iris are somewhat more deeply marked by defects in the skeletal body, while the corresponding areas of the mesial half are more deeply marked by defects occurring in the visceral body. The mesial half of the irides as to the rings indicating viscera, are more deeply marked by defects in the visceral body while the lateral portions comprehending corresponding areas will be less deeply marked, and

this is also true of rings seven and six of the mesial half of the irides.

It is believed that this very brief outline is sufficient corroborative aid to the Chiropractor, who will not have time nor necessity for complexity and detail in this kind of work.

OTHER MARKINGS

It must be remembered that by the retention of morbidity the organism produces in its substance all of the poisons that are produced by artificial combinations outside of the body, and therefore, the irides may be marked by defects produced by such accumulations in persons that have never been internally medicated, sometimes as completely as those that have been chronic medicine takers.

Notwithstanding this fact, however, for the purpose of giving the student some little data along these lines, a few of the characteristic defects produced by internal medication will be given, to which the student may add by his experience as he becomes more proficient in this phase of diagnosis.

It is suggested in this connection that the reader procure a chart of each iris; say four feet in diameter, diagramed as indicated in the key herewith given, and as he observes defects in irides that he indicate them on the charts. By this means he will soon have very extensive data which will be of much value as reference.

It will be understood that the drugs here to be mentioned taken into the alimentary canal, produce signs of defects in the departments of the stomach, intestine, liver, spleen, pancreas, kidneys and skin.

Frequently it is by taking all of these signs of defects and considering them together that the real situation may be approximated, and correctly diagnosed.

Mercury defects, in the various parts, are indicated somewhat as follows: In the blue eye by grayish-white rings and spots of metallic shine, more pronounced in the seventh ring. This discoloration is greenish-yellow in the brown eye and yellowish-green in the black eye.

Quinine gives to the blue iris a yellowish color in the various departments of it corresponding to the large glands. In brown eyes the discoloration is yellowish-gray, and in black eyes a brownish-green. In the gray eye the shade tends to the darker. It will of course be understood that these indications are plainly marked in the parts corresponding to the stomach and intestine as well as in the locations of the large digestive glands.

Arsenic produces indications of defects largely in that part of the iris corresponding to the skin and skeletal tissue, with splotches somewhat like snow flakes in the seventh and sixth rings, especially in those parts corresponding to the brain, vertebral column, and extremities.

Strychnine causes yellowish-white lines in the area corresponding to the stomach and intestine. These will also be apparent in the department of the brain, large glands, and the heart. Chronic strychnine takers have a silvery sheen covering the seventh ring at the margin of the iris, sometimes encroaching upon the sclerotica to a considerable depth.

Salicylic Acid produces a dirty gray color of the iris of the blue eye, usually beginning to show more

markedly in section 1. In the brown eye this discoloration is a dirty yellowish-gray. In the black eye it is a yellowish-green. This drug is used very extensively for rheumatism, and produces such marked changes in the iris as generally to be easily discovered.

Glycerine is the sweet principles of oils. It is remarkable for its peculiar property of dissolving in water. It is looked upon as being harmless, but from the fact that it will dissolve in water it is one of the most harmful drugs used in therapy, for it will saturate every tissue including bone. Glycerine produces large, white clouds in rings seven and six especially, and other parts of the iris corresponding to the skin, kidneys, brain and lungs. If it has been used very extensively these clouds sometimes encroach upon the sclerotica around the border of the iris.

Alcohol produces marked indications of defects in the area of the stomach, which is of a darker shade in the light eye, and of a lighter shade in the dark eye. Since alcohol is almost entirely eliminated through the brain, lungs and skin, it will be principally indicated in the departments of the iris corresponding to the brain, lungs and skin. The regular and continuous use of alcohol for a considerable period of time produces cloud-like rings around the margins of the iris sometimes encroaching upon the sclerotica.

The illustrations given are sufficient to introduce the student to the subject in such a way that he may follow out his investigations along the lines suggested.

It is suggested that the practitioner of Chiropractic use his knowledge of diagnosis from the eye, for the purpose of ascertaining the general adverse conditions of

persons with whom he comes in contact in a semi-professional way. That is, persons who come to him for consultation incident to becoming patients.

For such purposes diagnosis from the eye is of great aid to the Chiropractor, for by it, before he has made his Chiropractic diagnosis, he will be advised as to the general character of abnormality the individual expresses, and will have a good approximation as to the length of time the individual has been under adverse process, and in a general way the amount of injury he has sustained.

The Chiropractor who has a well developed knowledge of diagnosis from the eye as herein indicated will know what organs of his prospective patient are involved, and especially those organs which are pronouncedly abnormal, and he will be able to convince the patient before he enters into a Chiropractic examination that he is possessed of the knowledge of the way and manner he is affected and the extent of his abnormality.

In closing the author suggests that it is impossible for a practitioner to have too much knowledge as to the subject of diagnosis. It is called to his attention that much may be learned by diagnosis from the hand; diagnosis from the feet; diagnosis from the face; and as has already been suggested from the eye.

The Chiropractor should make himself expert in all of these in order to have as many aids to his vertebral and general body analysis and diagnosis as possible.

Carver's Chiropractic analysis of chirop

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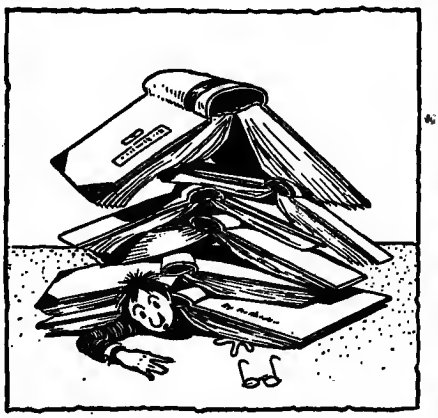

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TO READ, TO TEACH, TO STUDY, NOT ABUSE.
DON'T DOG ITS EARS, DON'T PENCIL ITS INSIDE,
DON'T TURN IT DOWN NOR OPEN IT TOO WIDE.
WHY SPOIL ITS LOOKS AND GIVE ITS BACK THE "BENDS"?
READ PROMPTLY AND RETURN, IT MAY HAVE OTHER FRIENDS.

JP HLF CS